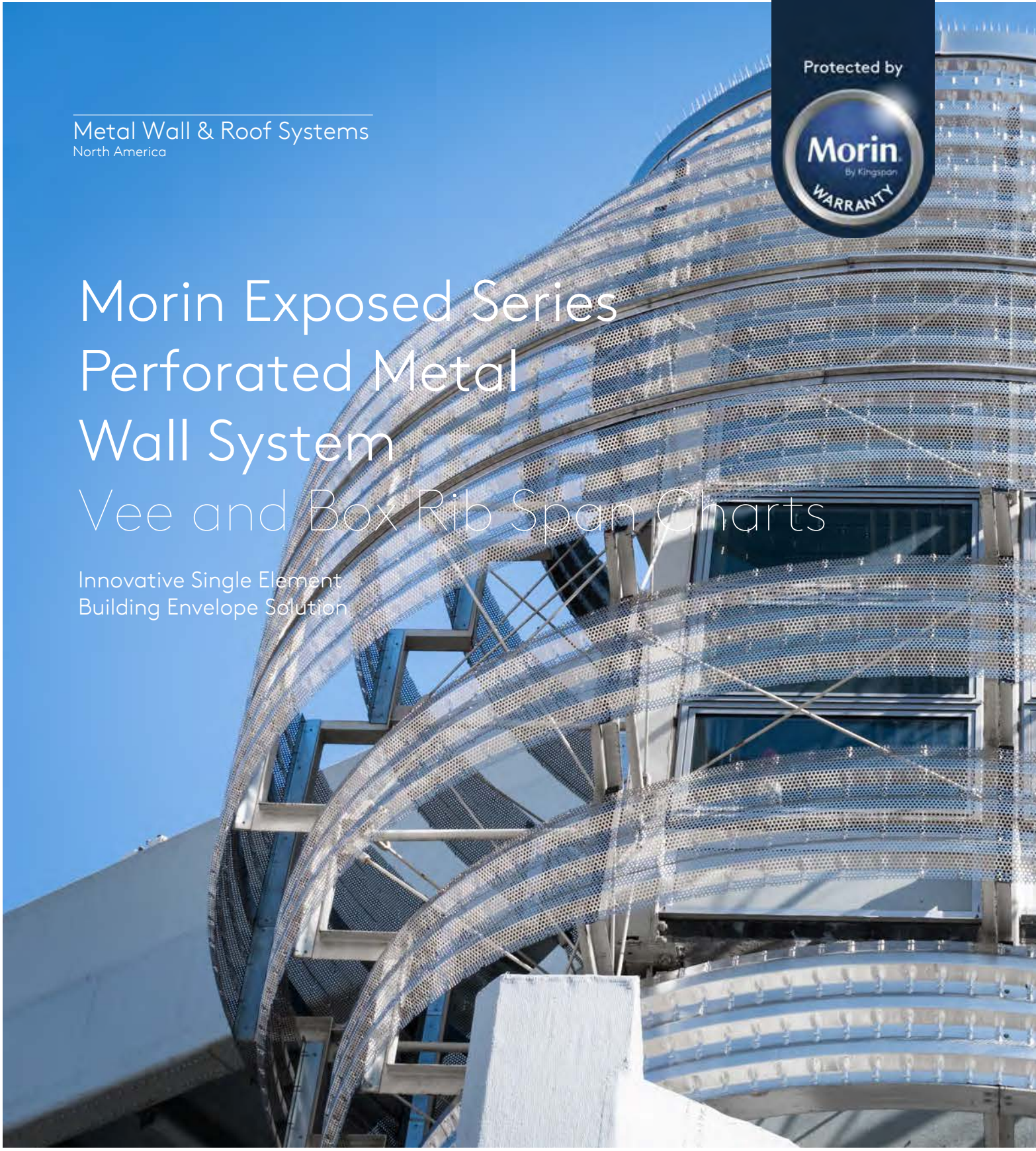
Metal Wall & Roof Systems
North America

Protected by Morin By Kingspan WARRANTY

Morin Exposed Series Perforated Metal Wall System

Vee and Box Rib Span Charts

Innovative Single Element
Building Envelope Solution



Morin By Kingspan

Product Data

Morin Exposed Series Perforated Range

The Morin Exposed Series features seventeen unique profiles (produced in several facilities). For wall applications, all Exposed Series panels are reversible with many asymmetrical panels offering a completely different profile per side chosen.

Vee and Box Rib Profile Options (See other booklets for additional options)

- **Exposed BR7-35-W Profile A/Profile B**
- **Exposed BR9-36-W Profile A/Profile B**
- **Exposed BR-28-ES Profile A/Profile B**
- **Exposed BR-35-S Profile A/Profile B**
- **Exposed E8-40-W Profile A/Profile B**
- **Exposed E-36-W Profile A/Profile B**
- **Exposed VB-31-S Profile A/Profile B**
- **Exposed VB-36-W Profile A/Profile B**
- **Exposed Y-29-ES Profile A/Profile B**
- **Exposed Y-29-W Profile A/Profile B**
- **Exposed Y-36-ES Profile A/Profile B**
- **Exposed Y-36-W Profile A/Profile B**

Applications

Weather-resistant or rainscreen rear-ventillated applications. Installed in Vertical or Horizontal orientations

Available Lengths

Standard Lengths (ft)	5′ – 30′ (1.52 – 9.14m)

Shorter and longer lengths available on request.

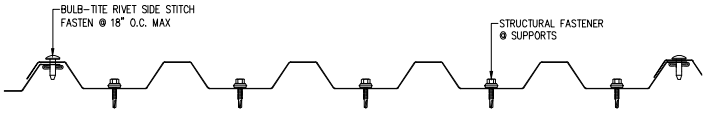
Standard Notes:

1. Numbers in the tables indicate clear span distance between the structural supports.
2. Section properties listed are for the perforated base sheet.
3. Load and span values listed do not include consideration of fastener with washer/oversize washer, to be determined by qualified personnel.
4. Refer to the following page for fastening pattern across the panel (along the support) and side lap/side stitch fastening.
5. For side stitch fastener use 9/32″ bulb-tite rivet.
6. This table is intended as a guide to the allowable loads (ASD) and spans for the panel product, however, actual assembly conditions must be determined by a qualified individual.
7. Deflection limit is L/180 unless otherwise noted.
8. Aluminum material confirming to 3003-H14; reach out to Morin technical for anodized (5005-H34) or any other Aluminum material
9. For project specific calculations, please contact Morin Technical Services at 800-640-9501.

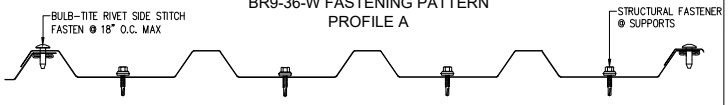
Vee Rib and Box Rib Profiles
Fastening Patterns:

PROFILE A

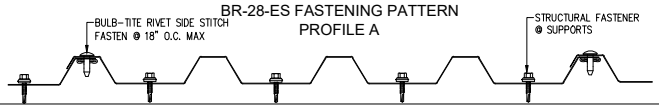
BR7-35-W FASTENING PATTERN
PROFILE A



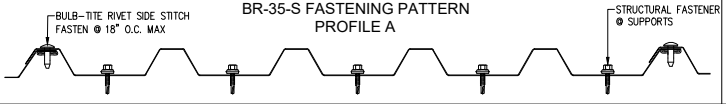
BR9-36-W FASTENING PATTERN
PROFILE A



BR-28-ES FASTENING PATTERN
PROFILE A



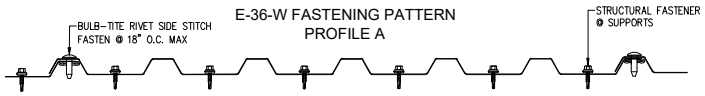
BR-35-S FASTENING PATTERN
PROFILE A



E8-40-W FASTENING PATTERN
PROFILE A



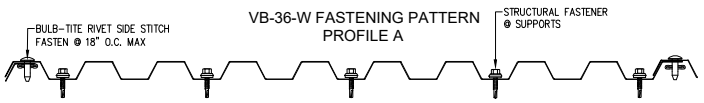
E-36-W FASTENING PATTERN
PROFILE A



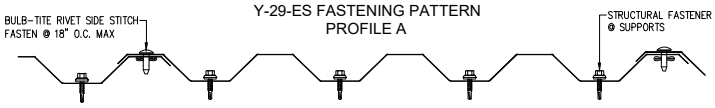
VB-31-S FASTENING PATTERN
PROFILE A



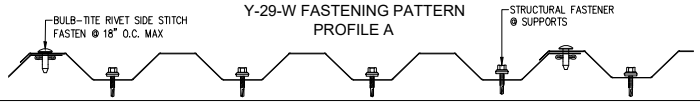
VB-36-W FASTENING PATTERN
PROFILE A



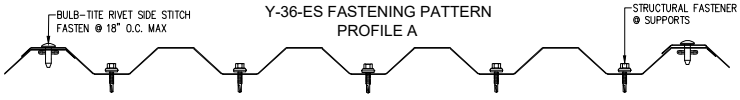
Y-29-ES FASTENING PATTERN
PROFILE A



Y-29-W FASTENING PATTERN
PROFILE A



Y-36-ES FASTENING PATTERN
PROFILE A

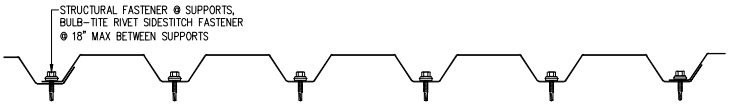


Y-36-W FASTENING PATTERN
PROFILE A

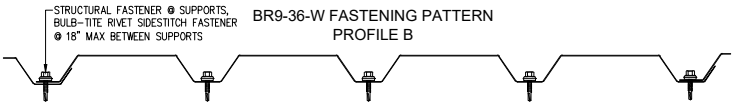


PROFILE B

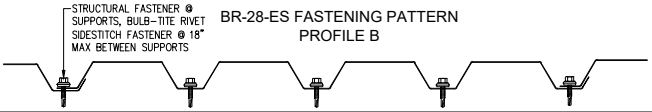
BR7-35-W FASTENING PATTERN
PROFILE B



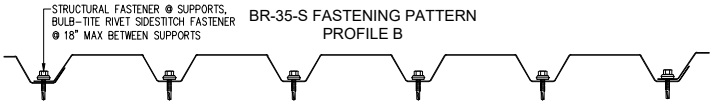
BR9-36-W FASTENING PATTERN
PROFILE B



BR-28-ES FASTENING PATTERN
PROFILE B



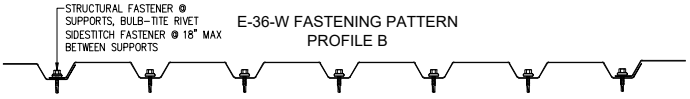
BR-35-S FASTENING PATTERN
PROFILE B



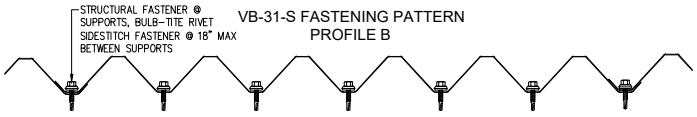
E8-40-W FASTENING PATTERN
PROFILE B



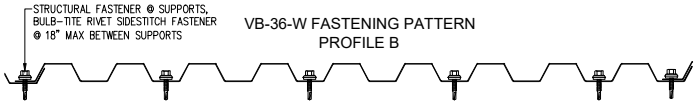
E-36-W FASTENING PATTERN
PROFILE B



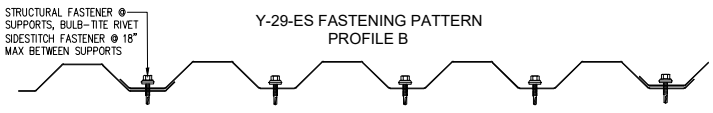
VB-31-S FASTENING PATTERN
PROFILE B



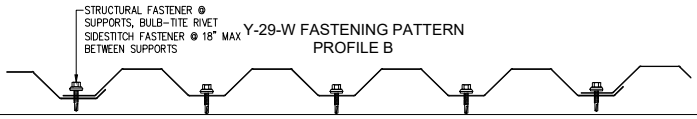
VB-36-W FASTENING PATTERN
PROFILE B



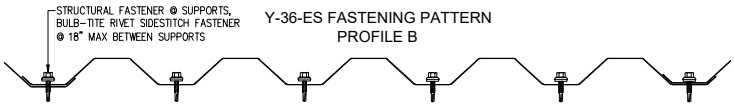
Y-29-ES FASTENING PATTERN
PROFILE B



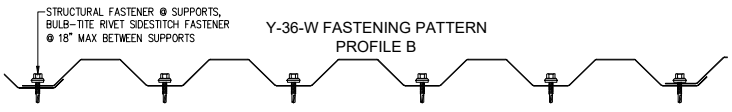
Y-29-W FASTENING PATTERN
PROFILE B



Y-36-ES FASTENING PATTERN
PROFILE B



Y-36-W FASTENING PATTERN
PROFILE B



Load / Span Data

BR7-35-W
Aluminum Perforated

0.032 in

Ix: 0.118 in^4/ft
Sx: 0.1312 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-11”	6’-11”	7’-9”	55	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-7”	7’-7”	6’-11”		Deflection	4’-0”	5’-5”	4’-11”
25	Stress	6’-2”	6’-2”	6’-11”	60	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	3’-11”	5’-3”	4’-10”
30	Stress	5’-8”	5’-8”	6’-4”	65	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-11”	6’-7”	6’-1”		Deflection	3’-9”	5’-1”	4’-8”
35	Stress	5’-3”	5’-3”	5’-10”	70	Stress	3’-8”	3’-8”	4’-2”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-8”	5’-0”	4’-7”
40	Stress	4’-11”	4’-11”	5’-6”	75	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-7”	4’-10”	4’-6”
45	Stress	4’-7”	4’-7”	5’-2”	80	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-6”	4’-9”	4’-4”
50	Stress	4’-5”	4’-5”	4’-11”	85	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-5”	4’-8”	4’-3”

BR7-35-W
Aluminum Perforated

0.032 in

Ix: 0.089 in^4/ft
Sx: 0.098 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-0”	6’-0”	6’-8”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-8”	4’-11”	4’-6”
25	Stress	5’-4”	5’-4”	6’-0”	60	Stress	3’-6”	3’-6”	3’-10”
	Deflection	4’-9”	6’-5”	5’-10”		Deflection	3’-6”	4’-9”	4’-5”
30	Stress	4’-11”	4’-11”	5’-6”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-5”	4’-8”	4’-3”
35	Stress	4’-6”	4’-6”	5’-1”	70	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-4”	4’-6”	4’-2”
40	Stress	4’-3”	4’-3”	4’-9”	75	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-3”	4’-5”	4’-1”
45	Stress	4’-0”	4’-0”	4’-6”	80	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-4”	4’-0”
50	Stress	3’-9”	3’-9”	4’-3”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

*See page 2 for standard notes.

BR7-35-W
Aluminum Perforated

0.032 in

Ix: 0.074 in^4/ft
Sx: 0.084 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-7”	5’-7”	6’-2”	55	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-3”
25	Stress	4’-11”	4’-11”	5’-7”	60	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-4”	4’-6”	4’-1”
30	Stress	4’-6”	4’-6”	5’-1”	65	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-3”	4’-4”	4’-0”
35	Stress	4’-2”	4’-2”	4’-8”	70	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	3’-11”	3’-11”	4’-5”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	3’-8”	3’-8”	4’-2”	80	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”
50	Stress	3’-6”	3’-6”	3’-11”	85	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

BR7-35-W
Aluminum Perforated

0.032 in

Ix: 0.0667 in^4/ft
Sx: 0.0783 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	6’-0”	55	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-4”	4’-5”	4’-1”
25	Stress	4’-10”	4’-10”	5’-4”	60	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-3”	5’-10”	5’-4”		Deflection	3’-2”	4’-4”	4’-0”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-1”	4’-3”	3’-10”
35	Stress	4’-1”	4’-1”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-1”	3’-9”
40	Stress	3’-9”	3’-9”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-8”	4’-11”	4’-7”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-5”	3’-5”	3’-9”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-10”	3’-6”

*See page 2 for standard notes.

Load / Span Data

BR7-35-W
Aluminum Perforated — 0.032 in

Ix: 0.052 in^4/ft
Sx: 0.065 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	2’-11”	2’-11”	3’-4”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-1”	4’-1”	3’-9”
25	Stress	4’-4”	4’-4”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-11”	4’-0”	3’-8”
30	Stress	4’-0”	4’-0”	4’-6”	65	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	3’-8”	3’-8”	4’-2”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-10”	3’-9”	3’-6”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-9”	3’-8”	3’-5”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-8”	3’-8”	3’-4”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-3”

BR7-35-W
Aluminum Perforated — 0.032 in

Ix: 0.035 in^4/ft
Sx: 0.049 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-3”
25	Stress	3’-9”	3’-9”	4’-3”	60	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-6”	3’-2”
30	Stress	3’-6”	3’-6”	3’-10”	65	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-6”	3’-5”	3’-1”
35	Stress	3’-2”	3’-2”	3’-7”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-4”	3’-0”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	3’-0”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-4”	3’-1”	2’-10”

*See page 2 for standard notes.

BR7-35-W
Aluminum Perforated

0.040 in

Ix: 0.074 in^4/ft
Sx: 0.084 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-9”	7’-9”	8’-8”	55	Stress	4’-8”	4’-8”	5’-3”
	Deflection	6’-0”	8’-2”	7’-6”		Deflection	4’-4”	5’-10”	5’-4”
25	Stress	6’-11”	6’-11”	7’-9”	60	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-7”	7’-7”	6’-11”		Deflection	4’-2”	5’-8”	5’-2”
30	Stress	6’-4”	6’-4”	7’-1”	65	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-1”	5’-6”	5’-1”
35	Stress	5’-10”	5’-10”	6’-7”	70	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	4’-0”	5’-4”	4’-11”
40	Stress	5’-6”	5’-6”	6’-1”	75	Stress	3’-12”	3’-12”	4’-6”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-11”	5’-3”	4’-10”
45	Stress	5’-2”	5’-2”	5’-9”	80	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-7”	6’-3”	5’-8”		Deflection	3’-10”	5’-2”	4’-8”
50	Stress	4’-11”	4’-11”	5’-6”	85	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-9”	5’-0”	4’-7”

BR7-35-W
Aluminum Perforated

0.040 in

Ix: 0.112 in^4/ft
Sx: 0.122 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-8”	6’-8”	7’-6”	55	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-6”	7’-5”	6’-10”		Deflection	3’-11”	5’-3”	4’-10”
25	Stress	6’-0”	6’-0”	6’-8”	60	Stress	3’-10”	3’-10”	4’-4”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-10”	5’-2”	4’-9”
30	Stress	5’-6”	5’-6”	6’-1”	65	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-10”	6’-6”	5’-11”		Deflection	3’-8”	5’-0”	4’-7”
35	Stress	5’-1”	5’-1”	5’-8”	70	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-7”	4’-11”	4’-6”
40	Stress	4’-9”	4’-9”	5’-3”	75	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-6”	4’-9”	4’-5”
45	Stress	4’-5”	4’-5”	5’-0”	80	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-5”	4’-8”	4’-3”
50	Stress	4’-3”	4’-3”	4’-9”	85	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-5”	4’-7”	4’-2”

*See page 2 for standard notes.

Load / Span Data

BR7-35-W
Aluminum Perforated — 0.040 in

Ix: 0.092 in^4/ft
Sx: 0.104 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-11”	55	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	3’-8”	5’-0”	4’-7”
25	Stress	5’-6”	5’-6”	6’-2”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-10”	4’-5”
30	Stress	5’-1”	5’-1”	5’-8”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-6”	4’-8”	4’-4”
35	Stress	4’-8”	4’-8”	5’-3”	70	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-5”	4’-7”	4’-2”
40	Stress	4’-4”	4’-4”	4’-11”	75	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-1”
45	Stress	4’-1”	4’-1”	4’-7”	80	Stress	3’-1”	3’-1”	3’-6”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-0”
50	Stress	3’-11”	3’-11”	4’-4”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-10”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

BR7-35-W
Aluminum Perforated — 0.040 in

Ix: 0.083 in^4/ft
Sx: 0.098 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-0”	6’-0”	6’-8”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-7”	4’-10”	4’-5”
25	Stress	3’-9”	3’-9”	4’-3”	60	Stress	3’-5”	3’-5”	3’-10”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	3’-6”	3’-6”	3’-10”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	3’-2”	3’-2”	3’-7”	70	Stress	3’-2”	3’-2”	3’-7”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	3’-1”	3’-1”	3’-5”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	3’-2”	4’-4”	4’-0”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-12”	2’-12”	3’-4”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	3’-2”	4’-3”	3’-11”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-11”	2’-11”	2’-11”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	3’-1”	4’-2”	4’-2”

*See page 2 for standard notes.

BR7-35-W
Aluminum Perforated

0.040 in

Ix: 0.065 in^4/ft
Sx: 0.081 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-1”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	4’-11”	4’-11”	5’-5”	60	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-4”	3’-11”
30	Stress	4’-5”	4’-5”	5’-0”	65	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	3’-10”	3’-10”	4’-4”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-11”	4’-0”	3’-8”
45	Stress	3’-8”	3’-8”	4’-1”	80	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

BR7-35-W
Aluminum Perforated

0.040 in

Ix: 0.043 in^4/ft
Sx: 0.061 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	2’-10”	3’-10”	3’-7”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-9”	3’-9”	3’-5”
30	Stress	3’-10”	3’-10”	4’-4”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-8”	3’-8”	3’-4”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-8”	3’-7”	3’-3”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-2”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-2”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”

*See page 2 for standard notes.

Load / Span Data

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.185 in^4/ft
Sx: 0.203 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-8”	8’-8”	9’-8”	55	Stress	5’-3”	5’-3”	5’-10”
	Deflection	6’-6”	8’-9”	8’-1”		Deflection	4’-8”	6’-3”	5’-9”
25	Stress	7’-9”	7’-9”	8’-8”	60	Stress	4’-12”	4’-12”	5’-7”
	Deflection	6’-0”	8’-2”	7’-6”		Deflection	4’-6”	6’-1”	5’-7”
30	Stress	7’-1”	7’-1”	7’-11”	65	Stress	4’-9”	4’-9”	5’-4”
	Deflection	5’-8”	7’-8”	7’-0”		Deflection	4’-5”	5’-11”	5’-5”
35	Stress	6’-6”	6’-6”	7’-4”	70	Stress	4’-7”	4’-7”	5’-2”
	Deflection	5’-5”	7’-3”	6’-8”		Deflection	4’-3”	5’-9”	5’-4”
40	Stress	6’-1”	6’-1”	6’-10”	75	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	4’-2”	5’-8”	5’-2”
45	Stress	5’-9”	5’-9”	6’-5”	80	Stress	4’-4”	4’-4”	4’-10”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	4’-1”	5’-6”	5’-1”
50	Stress	5’-6”	5’-6”	6’-1”	85	Stress	4’-2”	4’-2”	4’-8”
	Deflection	4’-9”	6’-6”	5’-11”		Deflection	4’-0”	5’-5”	5’-0”

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.14 in^4/ft
Sx: 0.152 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-6”	7’-6”	8’-4”	55	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-11”	8’-0”	7’-4”		Deflection	4’-3”	5’-8”	5’-3”
25	Stress	6’-8”	6’-8”	7’-6”	60	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-6”	7’-5”	6’-10”		Deflection	4’-1”	5’-6”	5’-1”
30	Stress	6’-1”	6’-1”	6’-10”	65	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	4’-0”	5’-5”	4’-11”
35	Stress	5’-8”	5’-8”	6’-4”	70	Stress	3’-12”	3’-12”	4’-6”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-11”	5’-3”	4’-10”
40	Stress	5’-3”	5’-3”	5’-11”	75	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-10”	5’-2”	4’-9”
45	Stress	5’-0”	5’-0”	5’-7”	80	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-9”	5’-0”	4’-7”
50	Stress	4’-9”	4’-9”	5’-3”	85	Stress	3’-7”	3’-7”	4’-1”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-8”	4’-11”	4’-6”

*See page 2 for standard notes.

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.115 in^4/ft
Sx: 0.13 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-11"	6'-11"	7'-9"	55	Stress	4'-2"	4'-2"	4'-8"
	Deflection	5'-7"	7'-6"	6'-11"		Deflection	3'-11"	5'-4"	4'-11"
25	Stress	6'-2"	6'-2"	6'-11"	60	Stress	3'-12"	3'-12"	4'-5"
	Deflection	5'-2"	6'-11"	6'-5"		Deflection	3'-10"	5'-2"	4'-9"
30	Stress	5'-8"	5'-8"	6'-4"	65	Stress	3'-10"	3'-10"	4'-3"
	Deflection	4'-10"	6'-6"	6'-0"		Deflection	3'-9"	5'-1"	4'-8"
35	Stress	5'-3"	5'-3"	5'-10"	70	Stress	3'-8"	3'-8"	4'-2"
	Deflection	4'-7"	6'-3"	5'-8"		Deflection	3'-8"	4'-11"	4'-6"
40	Stress	4'-11"	4'-11"	5'-5"	75	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-5"	5'-11"	5'-5"		Deflection	3'-7"	4'-10"	4'-5"
45	Stress	4'-7"	4'-7"	5'-2"	80	Stress	3'-5"	3'-5"	3'-10"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-6"	4'-9"	4'-4"
50	Stress	4'-4"	4'-4"	4'-11"	85	Stress	3'-4"	3'-4"	3'-9"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	3'-5"	4'-7"	4'-3"

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.104 in^4/ft
Sx: 0.121 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6'-8"	6'-8"	7'-6"	55	Stress	4'-0"	4'-0"	4'-6"
	Deflection	5'-4"	7'-3"	6'-8"		Deflection	3'-10"	5'-2"	4'-9"
25	Stress	6'-0"	6'-0"	6'-8"	60	Stress	3'-10"	3'-10"	4'-4"
	Deflection	5'-0"	6'-9"	6'-2"		Deflection	3'-9"	5'-0"	4'-7"
30	Stress	5'-5"	5'-5"	6'-1"	65	Stress	3'-8"	3'-8"	4'-2"
	Deflection	4'-8"	6'-4"	5'-10"		Deflection	3'-7"	4'-11"	4'-6"
35	Stress	5'-1"	5'-1"	5'-8"	70	Stress	3'-7"	3'-7"	4'-0"
	Deflection	4'-5"	6'-0"	5'-6"		Deflection	3'-6"	4'-9"	4'-5"
40	Stress	4'-9"	4'-9"	5'-3"	75	Stress	3'-5"	3'-5"	3'-10"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-5"	4'-8"	4'-3"
45	Stress	4'-5"	4'-5"	5'-0"	80	Stress	3'-4"	3'-4"	3'-9"
	Deflection	4'-1"	5'-6"	5'-1"		Deflection	3'-5"	4'-7"	4'-2"
50	Stress	4'-3"	4'-3"	4'-9"	85	Stress	3'-3"	3'-3"	3'-7"
	Deflection	3'-11"	5'-4"	4'-11"		Deflection	3'-4"	4'-6"	4'-1"

*See page 2 for standard notes.

Load / Span Data

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.082 in^4/ft
Sx: 0.101 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-1”	6’-1”	6’-10”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-6”	4’-9”	4’-5”
25	Stress	5’-5”	5’-5”	6’-1”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-5”	3’-5”	3’-9”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	4’-7”	4’-7”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-6”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-2”	4’-4”	3’-11”
45	Stress	4’-1”	4’-1”	4’-6”	80	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-3”	3’-10”
50	Stress	3’-10”	3’-10”	4’-4”	85	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-1”	4’-2”	3’-9”

BR7-35-W
Aluminum Perforated

0.050 in

Ix: 0.054 in^4/ft
Sx: 0.076 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-11”	55	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-9”	4’-9”	5’-3”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	4’-0”	4’-0”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-9”	3’-8”	3’-4”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-4”

*See page 2 for standard notes.

BR9-36-W
Aluminum Perforated

0.032 in

Ix: 0.108 in^4/ft
Sx: 0.107 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-3”	6’-3”	7’-0”	55	Stress	3’-9”	3’-9”	4’-3”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	3’-10”	5’-3”	4’-10”
25	Stress	5’-7”	5’-7”	6’-3”	60	Stress	3’-7”	3’-7”	4’-1”
	Deflection	5’-0”	6’-10”	6’-3”		Deflection	3’-9”	5’-1”	4’-8”
30	Stress	5’-1”	5’-1”	5’-9”	65	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-8”	4’-11”	4’-7”
35	Stress	4’-9”	4’-9”	5’-4”	70	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-7”	4’-10”	4’-5”
40	Stress	4’-5”	4’-5”	4’-11”	75	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-6”	4’-9”	4’-4”
45	Stress	4’-2”	4’-2”	4’-8”	80	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-5”	4’-7”	4’-3”
50	Stress	4’-0”	4’-0”	4’-5”	85	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-4”	4’-6”	4’-2”

BR9-36-W
Aluminum Perforated

0.032 in

Ix: 0.081 in^4/ft
Sx: 0.08 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-1”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-6”	4’-9”	4’-4”
25	Stress	4’-10”	4’-10”	5’-5”	60	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-3”	4’-5”	4’-0”
40	Stress	3’-10”	3’-10”	4’-3”	75	Stress	2’-10”	2’-10”	3’-1”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-2”	4’-4”	3’-11”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-1”	4’-1”	3’-9”

*See page 2 for standard notes.

Load / Span Data

BR9-36-W
Aluminum Perforated — 0.032 in

Ix: 0.067 in^4/ft
Sx: 0.068 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-0”	5’-0”	5’-7”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-4”	4’-6”	4’-1”
25	Stress	4’-6”	4’-6”	5’-0”	60	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-3”	4’-4”	4’-0”
30	Stress	4’-1”	4’-1”	4’-7”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-2”	4’-3”	3’-11”
35	Stress	3’-9”	3’-9”	4’-3”	70	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-1”	3’-9”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	3’-4”	3’-4”	3’-9”	80	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-2”	3’-2”	3’-6”	85	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-10”	3’-7”

BR9-36-W
Aluminum Perforated — 0.032 in

Ix: 0.061 in^4/ft
Sx: 0.064 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-10”	4’-10”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-2”	4’-4”	4’-0”
25	Stress	4’-4”	4’-4”	4’-10”	60	Stress	2’-10”	2’-10”	3’-1”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-1”	4’-2”	3’-10”
30	Stress	3’-11”	3’-11”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-0”	4’-1”	3’-9”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-11”	4’-0”	3’-8”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-11”	3’-11”	3’-7”
45	Stress	3’-3”	3’-3”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-10”	3’-6”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-9”	3’-9”	3’-5”

*See page 2 for standard notes.

BR9-36-W
Aluminum Perforated

0.032 in

Ix: 0.048 in^4/ft
Sx: 0.053 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-5”	4’-5”	4’-11”	55	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	2’-11”	4’-0”	3’-8”
25	Stress	3’-11”	3’-11”	4’-5”	60	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-10”	3’-10”	3’-7”
30	Stress	3’-7”	3’-7”	4’-0”	65	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	2’-10”	3’-9”	3’-6”
35	Stress	3’-4”	3’-4”	3’-9”	70	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-9”	3’-8”	3’-5”
40	Stress	3’-1”	3’-1”	3’-6”	75	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-7”	3’-4”
45	Stress	2’-11”	2’-11”	3’-3”	80	Stress	2’-2”	2’-2”	2’-6”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-3”
50	Stress	2’-10”	2’-10”	3’-1”	85	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-7”	3’-5”	3’-2”

BR9-36-W
Aluminum Perforated

0.032 in

Ix: 0.032 in^4/ft
Sx: 0.04 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-10”	3’-10”	4’-3”	55	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	2’-7”	3’-6”	3’-2”
25	Stress	3’-5”	3’-5”	3’-10”	60	Stress	2’-2”	2’-2”	2’-6”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-6”	3’-4”	3’-1”
30	Stress	3’-1”	3’-1”	3’-6”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	2’-11”	2’-11”	3’-3”	70	Stress	2’-1”	2’-1”	2’-3”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	2’-8”	2’-8”	3’-0”	75	Stress	1’-12”	1’-12”	2’-2”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-4”	3’-2”	2’-11”
45	Stress	2’-7”	2’-7”	2’-10”	80	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”
50	Stress	2’-5”	2’-5”	2’-8”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”

*See page 2 for standard notes.

Load / Span Data

BR9-36-W
Aluminum Perforated — 0.040 in

Ix: 0.135 in^4/ft
Sx: 0.133 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-0”	7’-0”	7’-10”	55	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-10”	7’-11”	7’-3”		Deflection	4’-2”	5’-8”	5’-2”
25	Stress	6’-3”	6’-3”	7’-0”	60	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-1”	5’-6”	5’-0”
30	Stress	5’-9”	5’-9”	6’-5”	65	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-11”	5’-4”	4’-11”
35	Stress	5’-3”	5’-3”	5’-11”	70	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-10”	5’-2”	4’-9”
40	Stress	4’-11”	4’-11”	5’-6”	75	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-9”	5’-1”	4’-8”
45	Stress	4’-8”	4’-8”	5’-3”	80	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-6”	6’-0”	5’-6”		Deflection	3’-8”	5’-0”	4’-7”
50	Stress	4’-5”	4’-5”	4’-11”	85	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-7”	4’-10”	4’-6”

BR9-36-W
Aluminum Perforated — 0.040 in

Ix: 0.102 in^4/ft
Sx: 0.1 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-0”	6’-0”	6’-9”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-5”	5’-5”	6’-0”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	4’-11”	4’-11”	5’-6”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-5”
35	Stress	4’-7”	4’-7”	5’-1”	70	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	4’-3”	4’-3”	4’-9”	75	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-0”	4’-0”	4’-6”	80	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	3’-10”	3’-10”	4’-3”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-1”

*See page 2 for standard notes.

BR9-36-W
Aluminum Perforated

0.040 in

Ix: 0.084 in^4/ft
Sx: 0.085 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-7”	5’-7”	6’-3”	55	Stress	3’-4”	3’-4”	3’-9”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-7”	4’-10”	4’-5”
25	Stress	5’-0”	5’-0”	5’-7”	60	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-6”	4’-8”	4’-4”
30	Stress	4’-7”	4’-7”	5’-1”	65	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-4”	4’-7”	4’-2”
35	Stress	4’-3”	4’-3”	4’-9”	70	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	3’-11”	3’-11”	4’-5”	75	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	3’-3”	4’-4”	4’-0”
45	Stress	3’-9”	3’-9”	4’-2”	80	Stress	2’-10”	2’-10”	3’-1”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-2”	4’-3”	3’-11”
50	Stress	3’-6”	3’-6”	3’-11”	85	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-1”	4’-2”	3’-10”

BR9-36-W
Aluminum Perforated

0.040 in

Ix: 0.076 in^4/ft
Sx: 0.08 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-0”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-5”	4’-8”	4’-3”
25	Stress	4’-10”	4’-10”	5’-5”	60	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-4”	4’-6”	4’-2”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-3”	4’-5”	4’-1”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-2”	4’-4”	3’-11”
40	Stress	3’-10”	3’-10”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-1”	4’-1”	3’-9”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	3’-0”	4’-0”	3’-8”

*See page 2 for standard notes.

Load / Span Data

BR9-36-W
Aluminum Perforated

0.040 in

Ix: 0.06 in^4/ft
Sx: 0.066 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-2”	4’-4”	3’-11”
25	Stress	4’-5”	4’-5”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-1”	4’-2”	3’-10”
30	Stress	4’-0”	4’-0”	4’-6”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-0”	4’-1”	3’-9”
35	Stress	3’-9”	3’-9”	4’-2”	70	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-11”	4’-0”	3’-8”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-10”	3’-10”	3’-7”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-9”	3’-6”
50	Stress	3’-1”	3’-1”	3’-6”	85	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-9”	3’-9”	3’-5”

BR9-36-W
Aluminum Perforated

0.040 in

Ix: 0.04 in^4/ft
Sx: 0.05 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	2’-9”	3’-9”	3’-5”
25	Stress	3’-10”	3’-10”	4’-3”	60	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	2’-8”	3’-8”	3’-4”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-7”	3’-6”	3’-3”
35	Stress	3’-3”	3’-3”	3’-7”	70	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-7”	3’-5”	3’-2”
40	Stress	3’-0”	3’-0”	3’-5”	75	Stress	2’-2”	2’-2”	2’-6”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-4”	3’-1”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-5”	3’-4”	3’-0”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”

*See page 2 for standard notes.

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.163 in^4/ft
Sx: 0.161 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-8”	7’-8”	8’-7”	55	Stress	4’-8”	4’-8”	5’-2”
	Deflection	6’-3”	8’-5”	7’-9”		Deflection	4’-5”	6’-0”	5’-6”
25	Stress	6’-10”	6’-10”	7’-8”	60	Stress	4’-5”	4’-5”	4’-11”
	Deflection	5’-9”	7’-10”	7’-2”		Deflection	4’-4”	5’-10”	5’-4”
30	Stress	6’-3”	6’-3”	7’-0”	65	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-2”	5’-8”	5’-3”
35	Stress	5’-10”	5’-10”	6’-6”	70	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	4’-1”	5’-7”	5’-1”
40	Stress	5’-5”	5’-5”	6’-1”	75	Stress	3’-12”	3’-12”	4’-5”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	4’-0”	5’-5”	5’-0”
45	Stress	5’-1”	5’-1”	5’-9”	80	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-11”	5’-4”	4’-10”
50	Stress	4’-10”	4’-10”	5’-5”	85	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-10”	5’-2”	4’-9”

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.124 in^4/ft
Sx: 0.12 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-8”	6’-8”	7’-5”	55	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-8”	7’-8”	7’-0”		Deflection	4’-1”	5’-6”	5’-0”
25	Stress	5’-11”	5’-11”	6’-8”	60	Stress	3’-10”	3’-10”	4’-3”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	3’-11”	5’-4”	4’-11”
30	Stress	5’-5”	5’-5”	6’-1”	65	Stress	3’-8”	3’-8”	4’-1”
	Deflection	5’-0”	6’-8”	6’-2”		Deflection	3’-10”	5’-2”	4’-9”
35	Stress	5’-0”	5’-0”	5’-7”	70	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-9”	6’-4”	5’-10”		Deflection	3’-9”	5’-1”	4’-8”
40	Stress	4’-8”	4’-8”	5’-3”	75	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-8”	4’-11”	4’-6”
45	Stress	4’-5”	4’-5”	4’-11”	80	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-7”	4’-10”	4’-5”
50	Stress	4’-2”	4’-2”	4’-8”	85	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-6”	4’-9”	4’-4”

*See page 2 for standard notes.

Load / Span Data

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.102 in^4/ft
Sx: 0.103 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-10”	55	Stress	3’-8”	3’-8”	4’-2”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-6”	5’-6”	6’-2”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-5”
35	Stress	4’-8”	4’-8”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-3”	5’-6”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-1”	4’-1”	4’-7”	80	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	3’-11”	3’-11”	4’-4”	85	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-1”

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.092 in^4/ft
Sx: 0.096 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-11”	5’-11”	6’-8”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	3’-8”	5’-0”	4’-7”
25	Stress	5’-4”	5’-4”	5’-11”	60	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-10”	4’-5”
30	Stress	4’-10”	4’-10”	5’-5”	65	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-6”	4’-8”	4’-4”
35	Stress	4’-6”	4’-6”	5’-0”	70	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-5”	4’-7”	4’-2”
40	Stress	4’-2”	4’-2”	4’-8”	75	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-1”
45	Stress	3’-11”	3’-11”	4’-5”	80	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-0”
50	Stress	3’-9”	3’-9”	4’-2”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-10”	5’-1”	4’-8”		Deflection	3’-2”	4’-4”	3’-11”

*See page 2 for standard notes.

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.072 in^4/ft
Sx: 0.08 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-1”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-2”
25	Stress	4’-10”	4’-10”	5’-5”	60	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-5”	5’-11”	5’-6”		Deflection	3’-4”	4’-5”	4’-1”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-2”	4’-4”	4’-0”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	3’-10”	3’-10”	4’-3”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-0”	3’-9”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

BR9-36-W
Aluminum Perforated

0.050 in

Ix: 0.048 in^4/ft
Sx: 0.06 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-8”	4’-8”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	2’-11”	4’-0”	3’-8”
25	Stress	4’-2”	4’-3”	4’-8”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-10”	5’-0”	4’-9”		Deflection	2’-10”	3’-11”	3’-7”
30	Stress	3’-10”	3’-10”	4’-3”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	2’-10”	3’-9”	3’-6”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-9”	3’-8”	3’-5”
40	Stress	3’-4”	3’-4”	3’-8”	75	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-7”	3’-4”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-3”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-7”	3’-5”	3’-2”

*See page 2 for standard notes.

Load / Span Data

BR-28-ES
Aluminum Perforated — 0.032 in

Ix: 0.117 in^4/ft
Sx: 0.124 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-9”	6’-9”	7’-6”	55	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-0”	5’-4”	4’-11”
25	Stress	6’-0”	6’-0”	6’-9”	60	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	3’-10”	5’-3”	4’-9”
30	Stress	5’-6”	5’-6”	6’-2”	65	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-9”	5’-1”	4’-8”
35	Stress	5’-1”	5’-1”	5’-8”	70	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-8”	4’-11”	4’-7”
40	Stress	4’-9”	4’-9”	5’-4”	75	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-7”	4’-10”	4’-5”
45	Stress	4’-6”	4’-6”	5’-0”	80	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-6”	4’-9”	4’-4”
50	Stress	4’-3”	4’-3”	4’-9”	85	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-5”	4’-8”	4’-3”

BR-28-ES
Aluminum Perforated — 0.032 in

Ix: 0.088 in^4/ft
Sx: 0.093 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-10”	5’-10”	6’-6”	55	Stress	3’-6”	3’-6”	3’-11”
	Deflection	5’-1”	6’-10”	6’-4”		Deflection	3’-7”	4’-11”	4’-6”
25	Stress	5’-3”	5’-3”	5’-10”	60	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-9”	6’-4”	5’-10”		Deflection	3’-6”	4’-9”	4’-4”
30	Stress	4’-9”	4’-9”	5’-4”	65	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-5”	4’-8”	4’-3”
35	Stress	4’-5”	4’-5”	4’-11”	70	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-4”	4’-6”	4’-2”
40	Stress	4’-1”	4’-1”	4’-7”	75	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-3”	4’-5”	4’-1”
45	Stress	3’-11”	3’-11”	4’-4”	80	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-2”	4’-4”	4’-0”
50	Stress	3’-8”	3’-8”	4’-1”	85	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

*See page 2 for standard notes.

BR-28-ES
Aluminum Perforated

0.032 in

Ix: 0.073 in^4/ft
Sx: 0.079 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-0”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-3”
25	Stress	4’-10”	4’-10”	5’-5”	60	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-4”	4’-5”	4’-1”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-3”	4’-4”	4’-0”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	3’-10”	3’-10”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

BR-28-ES
Aluminum Perforated

0.032 in

Ix: 0.066 in^4/ft
Sx: 0.074 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-10”	55	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	4’-8”	4’-8”	5’-3”	60	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-2”	4’-4”	4’-0”
30	Stress	4’-3”	4’-3”	4’-9”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	3’-11”	3’-11”	4’-5”	70	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	3’-8”	3’-8”	4’-1”	75	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-4”	3’-4”	3’-8”	85	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

*See page 2 for standard notes.

Load / Span Data

BR-28-ES
Aluminum Perforated — 0.032 in

Ix: 0.052 in^4/ft
Sx: 0.062 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-4”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-0”	4’-1”	3’-9”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-11”	4’-0”	3’-8”
30	Stress	3’-11”	3’-11”	4’-4”	65	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-10”	3’-10”	3’-7”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-10”	3’-9”	3’-6”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-9”	3’-8”	3’-5”
45	Stress	3’-2”	3’-2”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-8”	3’-7”	3’-4”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-3”

BR-28-ES
Aluminum Perforated — 0.032 in

Ix: 0.034 in^4/ft
Sx: 0.046 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-1”	4’-1”	4’-7”	55	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-3”
25	Stress	3’-8”	3’-8”	4’-1”	60	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-6”	3’-2”
30	Stress	3’-4”	3’-4”	3’-9”	65	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-6”	3’-4”	3’-1”
35	Stress	3’-1”	3’-1”	3’-6”	70	Stress	2’-2”	2’-2”	2’-6”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
40	Stress	2’-11”	2’-11”	3’-3”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	2’-11”
45	Stress	2’-9”	2’-9”	3’-1”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-7”	2’-7”	2’-11”	85	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”

*See page 2 for standard notes.

BR-28-ES
Aluminum Perforated

0.040 in

Ix: 0.146 in^4/ft
Sx: 0.154 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-6”	7’-6”	8’-5”	55	Stress	4’-6”	4’-6”	5’-1”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-3”	5’-9”	5’-4”
25	Stress	6’-9”	6’-9”	7’-6”	60	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-2”	5’-7”	5’-2”
30	Stress	6’-2”	6’-2”	6’-10”	65	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-1”	5’-6”	5’-0”
35	Stress	5’-8”	5’-8”	6’-4”	70	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-11”	5’-4”	4’-11”
40	Stress	5’-4”	5’-4”	5’-11”	75	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-10”	5’-3”	4’-9”
45	Stress	5’-0”	5’-0”	5’-7”	80	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-1”	4’-8”
50	Stress	4’-9”	4’-9”	5’-4”	85	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-8”	5’-0”	4’-7”

BR-28-ES
Aluminum Perforated

0.040 in

Ix: 0.11 in^4/ft
Sx: 0.115 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-6”	6’-6”	7’-3”	55	Stress	3’-11”	3’-11”	4’-5”
	Deflection	5’-6”	7’-5”	6’-9”		Deflection	3’-11”	5’-3”	4’-10”
25	Stress	5’-10”	5’-10”	6’-6”	60	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-1”	6’-10”	6’-4”		Deflection	3’-9”	5’-1”	4’-8”
30	Stress	5’-4”	5’-4”	5’-11”	65	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-8”	5’-0”	4’-7”
35	Stress	4’-11”	4’-11”	5’-6”	70	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-7”	4’-10”	4’-6”
40	Stress	4’-7”	4’-7”	5’-2”	75	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-4”	5’-10”	5’-5”		Deflection	3’-6”	4’-9”	4’-4”
45	Stress	4’-4”	4’-4”	4’-10”	80	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-5”	4’-8”	4’-3”
50	Stress	4’-1”	4’-1”	4’-7”	85	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-7”	4’-2”

*See page 2 for standard notes.

Load / Span Data

BR-28-ES
Aluminum Perforated — 0.040 in

Ix: 0.091 in^4/ft
Sx: 0.099 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-0”	6’-0”	6’-9”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-8”	4’-11”	4’-6”
25	Stress	5’-5”	5’-5”	6’-0”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-10”	4’-5”
30	Stress	4’-11”	4’-11”	5’-6”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-6”	4’-8”	4’-3”
35	Stress	4’-7”	4’-7”	5’-1”	70	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-7”	4’-2”
40	Stress	4’-3”	4’-3”	4’-9”	75	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-5”	4’-1”
45	Stress	4’-0”	4’-0”	4’-6”	80	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-4”	4’-0”
50	Stress	3’-10”	3’-10”	4’-3”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

BR-28-ES
Aluminum Perforated — 0.040 in

Ix: 0.082 in^4/ft
Sx: 0.092 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-10”	5’-10”	6’-6”	55	Stress	3’-6”	3’-6”	3’-11”
	Deflection	5’-0”	6’-8”	6’-2”		Deflection	3’-6”	4’-9”	4’-5”
25	Stress	5’-2”	5’-2”	5’-10”	60	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	4’-9”	4’-9”	5’-4”	65	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	4’-5”	4’-5”	4’-11”	70	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	4’-1”	4’-1”	4’-7”	75	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-4”	3’-11”
45	Stress	3’-11”	3’-11”	4’-4”	80	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-3”	3’-10”
50	Stress	3’-8”	3’-8”	4’-1”	85	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-1”	4’-2”	3’-10”

*See page 2 for standard notes.

BR-28-ES
Aluminum Perforated

0.040 in

Ix: 0.065 in^4/ft
Sx: 0.077 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	5’-11”	55	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	4’-9”	4’-9”	5’-4”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-3”	3’-11”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	4’-0”	4’-0”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-1”	4’-8”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-11”	4’-0”	3’-8”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

BR-28-ES
Aluminum Perforated

0.040 in

Ix: 0.043 in^4/ft
Sx: 0.058 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-7”	4’-7”	5’-2”	55	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	2’-10”	3’-10”	3’-6”
25	Stress	4’-1”	4’-1”	4’-7”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-9”	3’-9”	3’-5”
30	Stress	3’-9”	3’-9”	4’-2”	65	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-8”	3’-8”	3’-4”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-7”	3’-7”	3’-3”
40	Stress	3’-3”	3’-3”	3’-8”	75	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-2”
45	Stress	3’-1”	3’-1”	3’-5”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”
50	Stress	2’-11”	2’-11”	3’-3”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”

*See page 2 for standard notes.

Load / Span Data

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.176 in^4/ft
Sx: 0.172 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-11”	7’-11”	8’-10”	55	Stress	4’-9”	4’-9”	5’-4”
	Deflection	6’-5”	8’-7”	7’-11”		Deflection	4’-7”	6’-2”	5’-8”
25	Stress	7’-1”	7’-1”	7’-11”	60	Stress	4’-7”	4’-7”	5’-1”
	Deflection	5’-11”	8’-0”	7’-4”		Deflection	4’-5”	6’-0”	5’-6”
30	Stress	6’-6”	6’-6”	7’-3”	65	Stress	4’-5”	4’-5”	4’-11”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-4”	5’-10”	5’-4”
35	Stress	6’-0”	6’-0”	6’-8”	70	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	4’-2”	5’-8”	5’-3”
40	Stress	5’-7”	5’-7”	6’-3”	75	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	4’-1”	5’-7”	5’-1”
45	Stress	5’-3”	5’-3”	5’-11”	80	Stress	3’-12”	3’-12”	4’-5”
	Deflection	4’-10”	6’-7”	6’-1”		Deflection	4’-0”	5’-5”	5’-0”
50	Stress	5’-0”	5’-0”	5’-7”	85	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-11”	5’-4”	4’-11”

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.133 in^4/ft
Sx: 0.128 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-10”	6’-10”	7’-8”	55	Stress	4’-2”	4’-2”	4’-7”
	Deflection	5’-10”	7’-10”	7’-3”		Deflection	4’-2”	5’-7”	5’-2”
25	Stress	6’-2”	6’-2”	6’-10”	60	Stress	3’-11”	3’-11”	4’-5”
	Deflection	5’-5”	7’-3”	6’-8”		Deflection	4’-0”	5’-5”	5’-0”
30	Stress	5’-7”	5’-7”	6’-3”	65	Stress	3’-10”	3’-10”	4’-3”
	Deflection	5’-1”	6’-10”	6’-4”		Deflection	3’-11”	5’-4”	4’-10”
35	Stress	5’-2”	5’-2”	5’-9”	70	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-10”	5’-2”	4’-9”
40	Stress	4’-10”	4’-10”	5’-5”	75	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-9”	5’-1”	4’-8”
45	Stress	4’-7”	4’-7”	5’-1”	80	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-8”	4’-11”	4’-7”
50	Stress	4’-4”	4’-4”	4’-10”	85	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-7”	4’-10”	4’-5”

*See page 2 for standard notes.

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.109 in^4/ft
Sx: 0.11 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-4”	6’-4”	7’-1”	55	Stress	3’-10”	3’-10”	4’-3”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	3’-11”	5’-3”	4’-10”
25	Stress	5’-8”	5’-8”	6’-4”	60	Stress	3’-8”	3’-8”	4’-1”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-9”	5’-1”	4’-8”
30	Stress	5’-2”	5’-2”	5’-9”	65	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-8”	5’-0”	4’-7”
35	Stress	4’-9”	4’-9”	5’-4”	70	Stress	3’-5”	3’-5”	3’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-7”	4’-10”	4’-5”
40	Stress	4’-6”	4’-6”	5’-0”	75	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-6”	4’-9”	4’-4”
45	Stress	4’-3”	4’-3”	4’-9”	80	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-5”	4’-8”	4’-3”
50	Stress	4’-0”	4’-0”	4’-6”	85	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-7”	4’-2”

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.099 in^4/ft
Sx: 0.102 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-10”	55	Stress	3’-8”	3’-8”	4’-2”
	Deflection	5’-3”	7’-1”	6’-7”		Deflection	3’-9”	5’-1”	4’-8”
25	Stress	5’-6”	5’-6”	6’-2”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-11”	6’-7”	6’-1”		Deflection	3’-8”	4’-11”	4’-6”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-5”
35	Stress	4’-8”	4’-8”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-6”	4’-8”	4’-4”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-5”	4’-7”	4’-3”
45	Stress	4’-1”	4’-1”	4’-7”	80	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-6”	4’-1”
50	Stress	3’-11”	3’-11”	4’-4”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-5”	4’-0”

*See page 2 for standard notes.

Load / Span Data

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.078 in^4/ft
Sx: 0.085 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-7”	5’-7”	6’-3”	55	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-6”	4’-8”	4’-4”
25	Stress	5’-0”	5’-0”	5’-7”	60	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-4”	4’-7”	4’-2”
30	Stress	4’-7”	4’-7”	5’-1”	65	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-3”	4’-5”	4’-1”
35	Stress	4’-3”	4’-3”	4’-9”	70	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-2”	4’-4”	4’-0”
40	Stress	3’-11”	3’-11”	4’-5”	75	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-10”	5’-3”	4’-9”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	3’-9”	3’-9”	4’-2”	80	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	3’-6”	3’-6”	3’-11”	85	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	3’-0”	4’-1”	3’-9”

BR-28-ES
Aluminum Perforated

0.050 in

Ix: 0.051 in^4/ft
Sx: 0.064 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-10”	4’-10”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-0”	4’-1”	3’-9”
25	Stress	4’-4”	4’-4”	4’-10”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-11”	4’-0”	3’-8”
30	Stress	3’-11”	3’-11”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-10”	3’-10”	3’-7”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-10”	3’-9”	3’-6”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-9”	3’-8”	3’-5”
45	Stress	3’-3”	3’-3”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-8”	3’-7”	3’-4”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-1”	4’-3”	3’-10”		Deflection	2’-7”	3’-6”	3’-3”

*See page 2 for standard notes.

BR-35-S
Aluminum Perforated

0.032 in

Ix: 0.122 in^4/ft
Sx: 0.126 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-10”	6’-10”	7’-7”	55	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-8”	7’-8”	7’-0”		Deflection	4’-0”	5’-5”	5’-0”
25	Stress	6’-1”	6’-1”	6’-10”	60	Stress	3’-11”	3’-11”	4’-5”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	3’-11”	5’-3”	4’-10”
30	Stress	5’-7”	5’-7”	6’-3”	65	Stress	3’-9”	3’-9”	4’-3”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-10”	5’-2”	4’-9”
35	Stress	5’-2”	5’-2”	5’-9”	70	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-9”	5’-0”	4’-7”
40	Stress	4’-10”	4’-10”	5’-5”	75	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-8”	4’-11”	4’-6”
45	Stress	4’-6”	4’-6”	5’-1”	80	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-7”	4’-10”	4’-5”
50	Stress	4’-4”	4’-4”	4’-10”	85	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-6”	4’-9”	4’-4”

BR-35-S
Aluminum Perforated

0.032 in

Ix: 0.092 in^4/ft
Sx: 0.094 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-11”	5’-11”	6’-7”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	3’-8”	5’-0”	4’-7”
25	Stress	5’-3”	5’-3”	5’-11”	60	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-10”	4’-5”
30	Stress	4’-10”	4’-10”	5’-4”	65	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-6”	4’-8”	4’-4”
35	Stress	4’-5”	4’-5”	5’-0”	70	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-5”	4’-7”	4’-2”
40	Stress	4’-2”	4’-2”	4’-8”	75	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-1”
45	Stress	3’-11”	3’-11”	4’-5”	80	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-0”
50	Stress	3’-9”	3’-9”	4’-2”	85	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

*See page 2 for standard notes.

Load / Span Data

BR-35-S
Aluminum Perforated — 0.032 in

Ix: 0.076 in^4/ft
Sx: 0.081 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-5”	5’-5”	6’-1”	55	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-5”	4’-8”	4’-3”
25	Stress	4’-10”	4’-10”	5’-5”	60	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-4”	4’-6”	4’-2”
30	Stress	4’-5”	4’-5”	5’-0”	65	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-3”	4’-5”	4’-0”
35	Stress	4’-1”	4’-1”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	3’-10”	3’-10”	4’-4”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	3’-7”	3’-7”	4’-1”	80	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-0”	4’-1”	3’-9”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	3’-0”	4’-0”	3’-8”

BR-35-S
Aluminum Perforated — 0.032 in

Ix: 0.069 in^4/ft
Sx: 0.075 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-11”	55	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-8”	6’-4”	5’-9”		Deflection	3’-4”	4’-6”	4’-2”
25	Stress	4’-8”	4’-8”	5’-3”	60	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-4”	5’-10”	5’-5”		Deflection	3’-3”	4’-4”	4’-0”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-2”	4’-3”	3’-11”
35	Stress	4’-0”	4’-0”	4’-5”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-1”	4’-2”	3’-10”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-0”	4’-1”	3’-9”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-11”	4’-0”	3’-8”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-11”	3’-11”	3’-7”

*See page 2 for standard notes.

BR-35-S
Aluminum Perforated

0.032 in

Ix: 0.054 in^4/ft
Sx: 0.063 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-10”	4’-10”	5’-4”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-3”	4’-3”	4’-10”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	3’-11”	3’-11”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-2”	3’-2”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-9”	3’-8”	3’-4”
50	Stress	3’-0”	3’-0”	3’-5”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-4”

BR-35-S
Aluminum Perforated

0.032 in

Ix: 0.036 in^4/ft
Sx: 0.047 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-2”	4’-2”	4’-8”	55	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-8”	3’-7”	3’-4”
25	Stress	3’-9”	3’-9”	4’-2”	60	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-7”	3’-6”	3’-3”
30	Stress	3’-5”	3’-5”	3’-10”	65	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-6”	3’-5”	3’-2”
35	Stress	3’-2”	3’-2”	3’-6”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-4”	3’-1”
40	Stress	2’-11”	2’-11”	3’-3”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	3’-0”
45	Stress	2’-9”	2’-9”	3’-1”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-8”	2’-8”	2’-11”	85	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-4”	3’-2”	2’-10”

*See page 2 for standard notes.

Load / Span Data

BR-35-S
Aluminum Perforated — 0.040 in

Ix: 0.145 in^4/ft
Sx: 0.144 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-3”	7’-3”	8’-1”	55	Stress	4’-5”	4’-5”	4’-11”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-3”	5’-9”	5’-4”
25	Stress	6’-6”	6’-6”	7’-3”	60	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-2”	5’-7”	5’-2”
30	Stress	5’-11”	5’-11”	6’-8”	65	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-1”	5’-6”	5’-0”
35	Stress	5’-6”	5’-6”	6’-2”	70	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-11”	5’-4”	4’-11”
40	Stress	5’-2”	5’-2”	5’-9”	75	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-10”	5’-2”	4’-9”
45	Stress	4’-10”	4’-10”	5’-5”	80	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-1”	4’-8”
50	Stress	4’-7”	4’-7”	5’-2”	85	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-8”	5’-0”	4’-7”

BR-35-S
Aluminum Perforated — 0.040 in

Ix: 0.11 in^4/ft
Sx: 0.107 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-3”	6’-3”	7’-0”	55	Stress	3’-9”	3’-9”	4’-3”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	3’-11”	5’-3”	4’-10”
25	Stress	5’-7”	5’-7”	6’-3”	60	Stress	3’-7”	3’-7”	4’-1”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-9”	5’-1”	4’-8”
30	Stress	5’-1”	5’-1”	5’-9”	65	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-8”	5’-0”	4’-7”
35	Stress	4’-9”	4’-9”	5’-4”	70	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-7”	4’-10”	4’-5”
40	Stress	4’-5”	4’-5”	5’-0”	75	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-6”	4’-9”	4’-4”
45	Stress	4’-2”	4’-2”	4’-8”	80	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-5”	4’-8”	4’-3”
50	Stress	4’-0”	4’-0”	4’-5”	85	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-7”	4’-2”

*See page 2 for standard notes.

BR-35-S
Aluminum Perforated

0.040 in

Ix: 0.09 in^4/ft
Sx: 0.092 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-10"	5'-10"	6'-6"	55	Stress	3'-6"	3'-6"	3'-11"
	Deflection	5'-1"	6'-11"	6'-4"		Deflection	3'-8"	4'-11"	4'-6"
25	Stress	5'-2"	5'-2"	5'-10"	60	Stress	3'-4"	3'-4"	3'-9"
	Deflection	4'-9"	6'-5"	5'-11"		Deflection	3'-7"	4'-9"	4'-5"
30	Stress	4'-9"	4'-9"	5'-4"	65	Stress	3'-3"	3'-3"	3'-7"
	Deflection	4'-6"	6'-0"	5'-7"		Deflection	3'-5"	4'-8"	4'-3"
35	Stress	4'-5"	4'-5"	4'-11"	70	Stress	3'-1"	3'-1"	3'-6"
	Deflection	4'-3"	5'-9"	5'-3"		Deflection	3'-4"	4'-7"	4'-2"
40	Stress	4'-1"	4'-1"	4'-7"	75	Stress	3'-0"	3'-0"	3'-4"
	Deflection	4'-1"	5'-6"	5'-0"		Deflection	3'-4"	4'-5"	4'-1"
45	Stress	3'-10"	3'-10"	4'-4"	80	Stress	2'-11"	2'-11"	3'-3"
	Deflection	3'-11"	5'-3"	4'-10"		Deflection	3'-3"	4'-4"	4'-0"
50	Stress	3'-8"	3'-8"	4'-1"	85	Stress	2'-10"	2'-10"	3'-2"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-2"	4'-3"	3'-11"

BR-35-S
Aluminum Perforated

0.040 in

Ix: 0.082 in^4/ft
Sx: 0.086 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5'-7"	5'-7"	6'-3"	55	Stress	3'-5"	3'-5"	3'-9"
	Deflection	4'-11"	6'-8"	6'-2"		Deflection	3'-6"	4'-9"	4'-5"
25	Stress	5'-0"	5'-0"	5'-7"	60	Stress	3'-3"	3'-3"	3'-7"
	Deflection	4'-7"	6'-2"	5'-8"		Deflection	3'-5"	4'-8"	4'-3"
30	Stress	4'-7"	4'-7"	5'-1"	65	Stress	3'-1"	3'-1"	3'-6"
	Deflection	4'-4"	5'-10"	5'-4"		Deflection	3'-4"	4'-6"	4'-2"
35	Stress	4'-3"	4'-3"	4'-9"	70	Stress	3'-0"	3'-0"	3'-4"
	Deflection	4'-1"	5'-7"	5'-1"		Deflection	3'-3"	4'-5"	4'-1"
40	Stress	4'-0"	4'-0"	4'-5"	75	Stress	2'-11"	2'-11"	3'-3"
	Deflection	3'-11"	5'-4"	4'-10"		Deflection	3'-2"	4'-4"	3'-11"
45	Stress	3'-9"	3'-9"	4'-2"	80	Stress	2'-10"	2'-10"	3'-2"
	Deflection	3'-9"	5'-1"	4'-8"		Deflection	3'-1"	4'-3"	3'-10"
50	Stress	3'-7"	3'-7"	4'-0"	85	Stress	2'-9"	2'-9"	3'-1"
	Deflection	3'-8"	4'-11"	4'-6"		Deflection	3'-1"	4'-2"	3'-9"

*See page 2 for standard notes.

Load / Span Data

BR-35-S
Aluminum Perforated — 0.040 in

Ix: 0.064 in^4/ft
Sx: 0.072 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-1”	5’-1”	5’-9”	55	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	4’-7”	4’-7”	5’-1”	60	Stress	2’-11”	2’-11”	3’-4”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-3”	3’-11”
30	Stress	4’-2”	4’-2”	4’-8”	65	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	3’-10”	3’-10”	4’-4”	70	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	3’-7”	3’-7”	4’-1”	75	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	2’-11”	4’-0”	3’-8”
45	Stress	3’-5”	3’-5”	3’-10”	80	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-3”	3’-3”	3’-7”	85	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

BR-35-S
Aluminum Perforated — 0.040 in

Ix: 0.043 in^4/ft
Sx: 0.054 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-5”	4’-5”	5’-0”	55	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	2’-10”	3’-10”	3’-6”
25	Stress	4’-0”	4’-0”	4’-5”	60	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-9”	3’-9”	3’-5”
30	Stress	3’-7”	3’-7”	4’-1”	65	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-8”	3’-8”	3’-4”
35	Stress	3’-4”	3’-4”	3’-9”	70	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-7”	3’-6”	3’-3”
40	Stress	3’-2”	3’-2”	3’-6”	75	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-5”	3’-2”
45	Stress	2’-11”	2’-11”	3’-4”	80	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”
50	Stress	2’-10”	2’-10”	3’-2”	85	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	3’-11”	3’-8”		Deflection	2’-5”	3’-4”	3’-1”

*See page 2 for standard notes.

BR-35-S
Aluminum Perforated

0.050 in

Ix: 0.182 in^4/ft
Sx: 0.174 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-0”	8’-0”	8’-11”	55	Stress	4’-10”	4’-10”	5’-5”
	Deflection	6’-5”	8’-9”	8’-0”		Deflection	4’-7”	6’-3”	5’-9”
25	Stress	7’-2”	7’-2”	6’-10”	60	Stress	4’-7”	4’-7”	5’-2”
	Deflection	6’-0”	8’-1”	6’-6”		Deflection	4’-6”	6’-1”	5’-7”
30	Stress	6’-6”	6’-6”	7’-3”	65	Stress	4’-5”	4’-5”	4’-11”
	Deflection	5’-8”	7’-7”	7’-0”		Deflection	4’-4”	5’-11”	5’-5”
35	Stress	6’-0”	6’-0”	6’-9”	70	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	4’-3”	5’-9”	5’-3”
40	Stress	5’-8”	5’-8”	6’-4”	75	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	4’-2”	5’-7”	5’-2”
45	Stress	5’-4”	5’-4”	5’-11”	80	Stress	3’-12”	3’-12”	4’-6”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	4’-1”	5’-6”	5’-1”
50	Stress	5’-1”	5’-1”	5’-8”	85	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	4’-0”	5’-5”	4’-11”

BR-35-S
Aluminum Perforated

0.050 in

Ix: 0.137 in^4/ft
Sx: 0.134 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-0”	7’-0”	7’-10”	55	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-11”	7’-11”	7’-4”		Deflection	4’-2”	5’-8”	5’-2”
25	Stress	6’-3”	6’-3”	7’-0”	60	Stress	4’-1”	4’-1”	4’-6”
	Deflection	5’-6”	7’-4”	6’-9”		Deflection	4’-1”	5’-6”	5’-1”
30	Stress	5’-9”	5’-9”	6’-5”	65	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-2”	6’-11”	6’-4”		Deflection	4’-0”	5’-4”	4’-11”
35	Stress	5’-4”	5’-4”	5’-11”	70	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-11”	6’-7”	6’-1”		Deflection	3’-10”	5’-3”	4’-10”
40	Stress	4’-11”	4’-11”	5’-6”	75	Stress	3’-7”	3’-7”	4’-1”
	Deflection	4’-8”	6’-4”	5’-9”		Deflection	3’-9”	5’-1”	4’-8”
45	Stress	4’-8”	4’-8”	5’-3”	80	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-8”	5’-0”	4’-7”
50	Stress	4’-5”	4’-5”	4’-11”	85	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-8”	4’-11”	4’-6”

*See page 2 for standard notes.

Load / Span Data

BR-35-S
Aluminum Perforated — 0.050 in

Ix: 0.113 in^4/ft
Sx: 0.114 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-6”	6’-6”	7’-3”	55	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-6”	7’-5”	6’-10”		Deflection	3’-11”	5’-4”	4’-11”
25	Stress	5’-10”	5’-10”	6’-6”	60	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-10”	5’-2”	4’-9”
30	Stress	5’-3”	5’-3”	5’-11”	65	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-9”	5’-0”	4’-7”
35	Stress	4’-11”	4’-11”	5’-6”	70	Stress	3’-6”	3’-6”	3’-10”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-8”	4’-11”	4’-6”
40	Stress	4’-7”	4’-7”	5’-1”	75	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-7”	4’-9”	4’-5”
45	Stress	4’-4”	4’-4”	4’-10”	80	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-2”	5’-8”	5’-3”		Deflection	3’-6”	4’-8”	4’-4”
50	Stress	4’-1”	4’-1”	4’-7”	85	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-5”	4’-7”	4’-3”

BR-35-S
Aluminum Perforated — 0.050 in

Ix: 0.103 in^4/ft
Sx: 0.107 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-3”	6’-3”	7’-0”	55	Stress	3’-9”	3’-9”	4’-3”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-7”	5’-7”	6’-3”	60	Stress	3’-7”	3’-7”	4’-1”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	5’-1”	5’-1”	5’-9”	65	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-8”	6’-4”	5’-9”		Deflection	3’-7”	4’-10”	4’-6”
35	Stress	4’-9”	4’-9”	5’-4”	70	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	4’-5”	4’-5”	4’-11”	75	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-2”	4’-2”	4’-8”	80	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	4’-0”	4’-0”	4’-5”	85	Stress	3’-0”	3’-0”	3’-5”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-4”	4’-5”	4’-1”

*See page 2 for standard notes.

BR-35-S
Aluminum Perforated

0.050 in

Ix: 0.08 in^4/ft
Sx: 0.089 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-9”	5’-9”	6’-5”	55	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-6”	4’-9”	4’-4”
25	Stress	5’-1”	5’-1”	5’-9”	60	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-7”	4’-3”
30	Stress	4’-8”	4’-8”	5’-3”	65	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-3”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-1”
35	Stress	4’-4”	4’-4”	4’-10”	70	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-3”	4’-4”	4’-0”
40	Stress	4’-0”	4’-0”	4’-6”	75	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	3’-10”	3’-10”	4’-3”	80	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	3’-7”	3’-7”	4’-0”	85	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”

BR-35-S
Aluminum Perforated

0.050 in

Ix: 0.053 in^4/ft
Sx: 0.067 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-5”	4’-5”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	4’-1”	4’-1”	4’-6”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	3’-9”	3’-9”	4’-2”	70	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-4”	3’-4”	3’-8”	80	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-8”	3’-4”
50	Stress	3’-2”	3’-2”	3’-6”	85	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-3”

*See page 2 for standard notes.

Load / Span Data

E8-40-W
Aluminum Perforated

0.032 in

Ix: 0.046 in^4/ft
Sx: 0.065 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	2’-11”	3’-11”	3’-7”
25	Stress	4’-4”	4’-4”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-10”	3’-10”	3’-6”
30	Stress	4’-0”	4’-0”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-9”	3’-9”	3’-5”
35	Stress	3’-8”	3’-8”	4’-2”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-8”	3’-8”	3’-4”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-7”	3’-7”	3’-3”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-6”	3’-2”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”

E8-40-W
Aluminum Perforated

0.032 in

Ix: 0.035 in^4/ft
Sx: 0.049 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-3”
25	Stress	3’-9”	3’-9”	4’-3”	60	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-6”	3’-2”
30	Stress	3’-5”	3’-5”	3’-10”	65	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-6”	3’-5”	3’-1”
35	Stress	3’-2”	3’-2”	3’-7”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-4”	3’-0”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	3’-0”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-3”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-4”	3’-1”	2’-10”

*See page 2 for standard notes.

E8-40-W
Aluminum Perforated

0.032 in

Ix: 0.029 in^4/ft
Sx: 0.042 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-11”	3’-11”	4’-4”	55	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-6”	3’-4”	3’-1”
25	Stress	3’-6”	3’-6”	3’-11”	60	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-5”	3’-3”	3’-0”
30	Stress	3’-2”	3’-2”	3’-7”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-4”	3’-2”	2’-11”
35	Stress	2’-11”	2’-11”	3’-4”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-4”	3’-1”	2’-10”
40	Stress	2’-9”	2’-9”	3’-1”	75	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-3”	3’-0”	2’-9”
45	Stress	2’-7”	2’-7”	2’-11”	80	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-2”	3’-0”	2’-9”
50	Stress	2’-6”	2’-6”	2’-9”	85	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-7”	3’-6”	3’-2”		Deflection	2’-2”	2’-11”	2’-8”

E8-40-W
Aluminum Perforated

0.032 in

Ix: 0.026 in^4/ft
Sx: 0.039 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-3”	55	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-5”	3’-3”	3’-0”
25	Stress	3’-4”	3’-4”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-4”	3’-2”	2’-11”
30	Stress	3’-1”	3’-1”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-3”	3’-1”	2’-10”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-10”	3’-9”	3’-6”		Deflection	2’-3”	3’-0”	2’-9”
40	Stress	2’-8”	2’-8”	3’-0”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-2”	2’-11”	2’-8”
45	Stress	2’-6”	2’-6”	2’-10”	80	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-7”	3’-6”	3’-2”		Deflection	2’-1”	2’-10”	2’-8”
50	Stress	2’-5”	2’-5”	2’-8”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-1”	2’-10”	2’-7”

*See page 2 for standard notes.

Load / Span Data

E8-40-W
Aluminum Perforated — 0.032 in

Ix: 0.02 in^4/ft
Sx: 0.032 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-5”	3’-5”	3’-10”	55	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-3”	3’-0”	2’-9”
25	Stress	3’-1”	3’-1”	3’-5”	60	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-2”	2’-11”	2’-8”
30	Stress	2’-10”	2’-10”	3’-2”	65	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-9”	3’-8”	3’-4”		Deflection	2’-1”	2’-10”	2’-7”
35	Stress	2’-7”	2’-7”	2’-11”	70	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-7”	3’-6”	3’-2”		Deflection	2’-1”	2’-9”	2’-6”
40	Stress	2’-5”	2’-5”	2’-9”	75	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-8”	2’-6”
45	Stress	2’-4”	2’-4”	2’-7”	80	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-8”	2’-5”
50	Stress	2’-2”	2’-2”	2’-5”	85	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-11”	2’-7”	2’-5”

E8-40-W
Aluminum Perforated — 0.032 in

Ix: 0.013 in^4/ft
Sx: 0.024 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-0”	3’-0”	3’-4”	55	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-8”	3’-8”	3’-4”		Deflection	1’-11”	2’-7”	2’-5”
25	Stress	2’-8”	2’-8”	3’-0”	60	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-6”	3’-5”	3’-1”		Deflection	1’-11”	2’-6”	2’-4”
30	Stress	2’-5”	2’-5”	2’-9”	65	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-10”	2’-6”	2’-3”
35	Stress	2’-3”	2’-3”	2’-6”	70	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-3”	3’-0”	2’-9”		Deflection	1’-9”	2’-5”	2’-3”
40	Stress	2’-1”	2’-1”	2’-4”	75	Stress	1’-6”	1’-6”	1’-9”
	Deflection	2’-2”	2’-11”	2’-8”		Deflection	1’-9”	2’-4”	2’-2”
45	Stress	2’-0”	2’-0”	2’-3”	80	Stress	1’-6”	1’-6”	1’-8”
	Deflection	2’-1”	2’-9”	2’-7”		Deflection	1’-8”	2’-4”	2’-1”
50	Stress	1’-11”	1’-11”	2’-1”	85	Stress	1’-5”	1’-5”	1’-7”
	Deflection	2’-0”	2’-8”	2’-6”		Deflection	1’-8”	2’-3”	2’-1”

*See page 2 for standard notes.

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.041 in^4/ft
Sx: 0.057 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-7”	4’-7”	5’-1”	55	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	2’-10”	3’-9”	3’-6”
25	Stress	4’-1”	4’-1”	4’-7”	60	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-9”	3’-8”	3’-4”
30	Stress	3’-9”	3’-9”	4’-2”	65	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-8”	3’-7”	3’-3”
35	Stress	3’-5”	3’-5”	3’-10”	70	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-7”	3’-6”	3’-2”
40	Stress	3’-3”	3’-3”	3’-7”	75	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-5”	3’-2”
45	Stress	3’-0”	3’-0”	3’-5”	80	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-0”	4’-0”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
50	Stress	2’-11”	2’-11”	3’-3”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.31 in^4/ft
Sx: 0.042 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-11”	3’-11”	4’-5”	55	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-7”	3’-5”	3’-2”
25	Stress	3’-6”	3’-6”	3’-11”	60	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-6”	3’-4”	3’-1”
30	Stress	3’-3”	3’-3”	3’-7”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-1”	4’-3”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	3’-0”	3’-0”	3’-4”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	2’-9”	2’-9”	3’-1”	75	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-1”	2’-10”
45	Stress	2’-8”	2’-8”	2’-11”	80	Stress	1’-12”	1’-12”	2’-2”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-0”	2’-9”
50	Stress	2’-6”	2’-6”	2’-9”	85	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-8”	3’-7”	3’-3”		Deflection	2’-2”	3’-0”	2’-9”

*See page 2 for standard notes.

Load / Span Data

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.025 in^4/ft
Sx: 0.036 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-8”	3’-8”	4’-1”	55	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-5”	3’-3”	3’-0”
25	Stress	3’-3”	3’-3”	3’-8”	60	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-4”	3’-2”	2’-11”
30	Stress	3’-0”	3’-0”	3’-4”	65	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-11”	3’-11”	3’-8”		Deflection	2’-3”	3’-1”	2’-10”
35	Stress	2’-9”	2’-9”	3’-1”	70	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-2”	3’-0”	2’-9”
40	Stress	2’-7”	2’-7”	2’-11”	75	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-2”	2’-11”	2’-8”
45	Stress	2’-5”	2’-5”	2’-9”	80	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-7”	3’-5”	3’-2”		Deflection	2’-1”	2’-10”	2’-7”
50	Stress	2’-4”	2’-4”	2’-7”	85	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-1”	2’-9”	2’-7”

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.023 in^4/ft
Sx: 0.034 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-6”	3’-6”	3’-11”	55	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-4”	3’-1”	2’-10”
25	Stress	3’-2”	3’-2”	3’-6”	60	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-3”	3’-0”	2’-9”
30	Stress	2’-11”	2’-11”	3’-3”	65	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-2”	2’-11”	2’-9”
35	Stress	2’-8”	2’-8”	3’-0”	70	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-8”	3’-8”	3’-4”		Deflection	2’-2”	2’-11”	2’-8”
40	Stress	2’-6”	2’-6”	2’-9”	75	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-7”	3’-6”	3’-2”		Deflection	2’-1”	2’-10”	2’-7”
45	Stress	2’-4”	2’-4”	2’-8”	80	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-9”	2’-6”
50	Stress	2’-3”	2’-3”	2’-6”	85	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	2’-0”	2’-8”	2’-6”

*See page 2 for standard notes.

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.018 in^4/ft
Sx: 0.028 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-3”	3’-3”	3’-7”	55	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-2”	2’-11”	2’-8”
25	Stress	2’-10”	2’-10”	3’-3”	60	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-1”	2’-10”	2’-7”
30	Stress	2’-7”	2’-7”	2’-11”	65	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-0”	2’-9”	2’-6”
35	Stress	2’-5”	2’-5”	2’-9”	70	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-8”	2’-5”
40	Stress	2’-3”	2’-3”	2’-6”	75	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-7”	2’-5”
45	Stress	2’-2”	2’-2”	2’-5”	80	Stress	1’-7”	1’-7”	1’-10”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-11”	2’-6”	2’-4”
50	Stress	2’-0”	2’-0”	2’-3”	85	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-2”	3’-0”	2’-9”		Deflection	1’-10”	2’-6”	2’-3”

E8-40-W
Aluminum Perforated

0.040 in

Ix: 0.043 in^4/ft
Sx: 0.061 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	2’-9”	2’-9”	3’-1”	55	Stress	1’-8”	1’-8”	1’-11”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	1’-10”	2’-6”	2’-4”
25	Stress	2’-6”	2’-6”	2’-9”	60	Stress	1’-7”	1’-7”	1’-10”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	1’-10”	2’-5”	2’-3”
30	Stress	2’-3”	2’-3”	2’-7”	65	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-9”	2’-4”	2’-2”
35	Stress	2’-1”	2’-1”	2’-4”	70	Stress	1’-6”	1’-6”	1’-8”
	Deflection	2’-2”	2’-11”	2’-8”		Deflection	1’-9”	2’-4”	2’-2”
40	Stress	2’-0”	2’-0”	2’-2”	75	Stress	1’-5”	1’-5”	1’-7”
	Deflection	2’-1”	2’-9”	2’-7”		Deflection	1’-8”	2’-3”	2’-1”
45	Stress	1’-10”	1’-10”	2’-1”	80	Stress	1’-5”	1’-5”	1’-7”
	Deflection	2’-0”	2’-8”	2’-6”		Deflection	1’-8”	2’-3”	2’-0”
50	Stress	1’-9”	1’-9”	2’-0”	85	Stress	1’-4”	1’-4”	1’-6”
	Deflection	1’-11”	2’-7”	2’-5”		Deflection	1’-7”	2’-2”	2’-0”

*See page 2 for standard notes.

Load / Span Data

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.072 in^4/ft
Sx: 0.101 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-1”	6’-1”	6’-10”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-9”	6’-5”	5’-10”		Deflection	3’-5”	4’-7”	4’-2”
25	Stress	5’-5”	5’-5”	6’-1”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-3”	4’-5”	4’-1”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-2”	4’-4”	4’-0”
35	Stress	4’-7”	4’-7”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-1”	4’-3”	3’-10”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-6”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-1”	3’-9”
45	Stress	4’-1”	4’-1”	4’-6”	80	Stress	3’-0”	3’-0”	3’-5”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	3’-0”	4’-0”	3’-8”
50	Stress	3’-10”	3’-10”	4’-4”	85	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-8”

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.054 in^4/ft
Sx: 0.075 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-10”	55	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-8”	4’-8”	5’-3”	60	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-0”	4’-0”	3’-9”
30	Stress	4’-3”	4’-3”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	4’-0”	4’-0”	4’-5”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-9”	3’-8”	3’-4”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-2”	4’-4”	3’-11”		Deflection	2’-8”	3’-7”	3’-4”

*See page 2 for standard notes.

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.045 in^4/ft
Sx: 0.064 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-10”	4’-10”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	2’-11”	3’-11”	3’-7”
25	Stress	4’-4”	4’-4”	4’-10”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-10”	3’-9”	3’-6”
30	Stress	4’-0”	4’-0”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-9”	3’-8”	3’-5”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-8”	3’-7”	3’-4”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-7”	3’-6”	3’-3”
45	Stress	3’-3”	3’-3”	3’-7”	80	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-5”	3’-2”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.04 in^4/ft
Sx: 0.06 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-8”	4’-8”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	2’-10”	3’-9”	3’-6”
25	Stress	4’-2”	4’-2”	4’-8”	60	Stress	2’-9”	2’-9”	3’-0”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-9”	3’-8”	3’-4”
30	Stress	3’-10”	3’-10”	4’-3”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-8”	3’-7”	3’-3”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-7”	3’-6”	3’-2”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-5”	3’-1”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-3”	2’-3”	2’-7”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”

*See page 2 for standard notes.

Load / Span Data

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.032 in^4/ft
Sx: 0.05 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	2’-7”	3’-6”	3’-2”
25	Stress	3’-10”	3’-10”	4’-3”	60	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-6”	3’-5”	3’-1”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	3’-3”	3’-3”	3’-7”	70	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-5”	3’-3”	2’-11”
40	Stress	3’-0”	3’-0”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-4”	3’-2”	2’-11”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”
50	Stress	2’-9”	2’-9”	3’-0”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”

E8-40-W
Aluminum Perforated

0.050 in

Ix: 0.021 in^4/ft
Sx: 0.038 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-2”	55	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-3”	3’-0”	2’-9”
25	Stress	3’-4”	3’-4”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-2”	2’-11”	2’-8”
30	Stress	3’-0”	3’-0”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-1”	2’-10”	2’-8”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-1”	2’-10”	2’-7”
40	Stress	2’-7”	2’-7”	2’-11”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-9”	2’-6”
45	Stress	2’-6”	2’-6”	2’-9”	80	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	2’-0”	2’-8”	2’-5”
50	Stress	2’-4”	2’-4”	2’-7”	85	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-4”	3’-2”	2’-10”		Deflection	1’-11”	2’-7”	2’-5”

*See page 2 for standard notes.

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.049 in^4/ft
Sx: 0.077 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	5’-11”	55	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-0”	4’-0”	3’-8”
25	Stress	4’-9”	4’-9”	5’-4”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	2’-11”	3’-11”	3’-7”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-10”	3’-10”	3’-6”
35	Stress	4’-0”	4’-0”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-9”	3’-9”	3’-5”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-8”	3’-8”	3’-4”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-2”	4’-4”	3’-11”		Deflection	2’-8”	3’-7”	3’-3”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-6”	3’-2”

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.037 in^4/ft
Sx: 0.058 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-7”	4’-7”	5’-2”	55	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-9”	3’-8”	3’-4”
25	Stress	4’-1”	4’-1”	4’-7”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-8”	3’-7”	3’-3”
30	Stress	3’-9”	3’-9”	4’-2”	65	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-7”	3’-6”	3’-2”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-6”	3’-5”	3’-1”
40	Stress	3’-3”	3’-3”	3’-8”	75	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-5”	3’-4”	3’-0”
45	Stress	3’-1”	3’-1”	3’-5”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”
50	Stress	2’-11”	2’-11”	3’-3”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-10”	3’-9”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”

*See page 2 for standard notes.

Load / Span Data

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.031 in^4/ft
Sx: 0.049 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-7”	3’-5”	3’-2”
25	Stress	3’-10”	3’-10”	4’-3”	60	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-6”	3’-4”	3’-1”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-1”	4’-3”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	3’-3”	3’-3”	3’-7”	70	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-1”	2’-10”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-0”	2’-9”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-8”	3’-7”	3’-3”		Deflection	2’-2”	3’-0”	2’-9”

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.028 in^4/ft
Sx: 0.046 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-1”	4’-1”	4’-7”	55	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-6”	3’-4”	3’-1”
25	Stress	3’-8”	3’-8”	4’-1”	60	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-2”	4’-4”	4’-0”		Deflection	2’-5”	3’-3”	3’-0”
30	Stress	3’-4”	3’-4”	3’-9”	65	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-4”	3’-2”	2’-11”
35	Stress	3’-1”	3’-1”	3’-6”	70	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-3”	3’-1”	2’-10”
40	Stress	2’-11”	2’-11”	3’-3”	75	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-0”	2’-9”
45	Stress	2’-9”	2’-9”	3’-1”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-8”	3’-7”	3’-3”		Deflection	2’-2”	2’-11”	2’-8”
50	Stress	2’-7”	2’-7”	2’-11”	85	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-7”	3’-5”	3’-2”		Deflection	2’-2”	2’-11”	2’-8”

*See page 2 for standard notes.

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.022 in^4/ft
Sx: 0.038 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-2”	55	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-2”	4’-4”	3’-11”		Deflection	2’-3”	3’-1”	2’-10”
25	Stress	3’-4”	3’-4”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-3”	3’-0”	2’-9”
30	Stress	3’-1”	3’-1”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-2”	2’-11”	2’-8”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-8”	3’-7”	3’-3”		Deflection	2’-1”	2’-10”	2’-7”
40	Stress	2’-8”	2’-8”	3’-0”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-6”	3’-5”	3’-2”		Deflection	2’-1”	2’-9”	2’-7”
45	Stress	2’-6”	2’-6”	2’-10”	80	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	2’-0”	2’-9”	2’-6”
50	Stress	2’-4”	2’-4”	2’-8”	85	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	2’-0”	2’-8”	2’-5”

E-36-W
Aluminum Perforated

0.032 in

Ix: 0.014 in^4/ft
Sx: 0.029 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-3”	3’-3”	3’-8”	55	Stress	2’-0”	2’-0”	2’-2”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-0”	2’-8”	2’-5”
25	Stress	2’-11”	2’-11”	3’-3”	60	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-7”	3’-6”	3’-2”		Deflection	1’-11”	2’-7”	2’-5”
30	Stress	2’-8”	2’-8”	3’-0”	65	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	1’-10”	2’-6”	2’-4”
35	Stress	2’-5”	2’-5”	2’-9”	70	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-4”	3’-1”	2’-10”		Deflection	1’-10”	2’-6”	2’-3”
40	Stress	2’-4”	2’-4”	2’-7”	75	Stress	1’-8”	1’-8”	1’-11”
	Deflection	2’-2”	3’-0”	2’-9”		Deflection	1’-9”	2’-5”	2’-3”
45	Stress	2’-2”	2’-2”	2’-5”	80	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-1”	2’-10”	2’-8”		Deflection	1’-9”	2’-4”	2’-2”
50	Stress	2’-1”	2’-1”	2’-4”	85	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-1”	2’-9”	2’-6”		Deflection	1’-9”	2’-4”	2’-2”

*See page 2 for standard notes.

Load / Span Data

E-36-W
Aluminum Perforated — 0.040 in

Ix: 0.062 in^4/ft
Sx: 0.096 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-11”	5’-11”	6’-8”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-3”	4’-4”	4’-0”
25	Stress	5’-4”	5’-4”	5’-11”	60	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-1”	4’-3”	3’-10”
30	Stress	4’-10”	4’-10”	5’-5”	65	Stress	3’-4”	3’-4”	3’-8”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-1”	4’-1”	3’-9”
35	Stress	4’-6”	4’-6”	5’-0”	70	Stress	3’-2”	3’-2”	3’-7”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-0”	4’-0”	3’-8”
40	Stress	4’-2”	4’-2”	4’-8”	75	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-11”	3’-11”	3’-7”
45	Stress	3’-11”	3’-11”	4’-5”	80	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-10”	3’-10”	3’-6”
50	Stress	3’-9”	3’-9”	4’-2”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-9”	3’-9”	3’-5”

E-36-W
Aluminum Perforated — 0.040 in

Ix: 0.047 in^4/ft
Sx: 0.072 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-2”	5’-2”	5’-9”	55	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	2’-11”	3’-11”	3’-8”
25	Stress	4’-7”	4’-7”	5’-2”	60	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-10”	3’-10”	3’-6”
30	Stress	4’-2”	4’-2”	4’-8”	65	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-9”	3’-9”	3’-5”
35	Stress	3’-11”	3’-11”	4’-4”	70	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-8”	3’-8”	3’-4”
40	Stress	3’-8”	3’-8”	4’-1”	75	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-8”	3’-7”	3’-3”
45	Stress	3’-5”	3’-5”	3’-10”	80	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-2”
50	Stress	3’-3”	3’-3”	3’-8”	85	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-2”

*See page 2 for standard notes.

E-36-W
Aluminum Perforated

0.040 in

Ix: 0.038 in^4/ft
Sx: 0.061 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-4”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-9”	3’-8”	3’-5”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-8”	3’-7”	3’-4”
30	Stress	3’-10”	3’-10”	4’-4”	65	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-7”	3’-6”	3’-3”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-2”	4’-4”	4’-0”		Deflection	2’-6”	3’-5”	3’-2”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-8”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	3’-0”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-5”	3’-2”	2’-11”

E-36-W
Aluminum Perforated

0.040 in

Ix: 0.035 in^4/ft
Sx: 0.057 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-7”	4’-7”	5’-2”	55	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-4”
25	Stress	4’-1”	4’-1”	4’-7”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-6”	3’-2”
30	Stress	3’-9”	3’-9”	4’-2”	65	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-6”	3’-5”	3’-1”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-4”	3’-0”
40	Stress	3’-3”	3’-3”	3’-8”	75	Stress	2’-4”	2’-4”	2’-8”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	3’-0”
45	Stress	3’-1”	3’-1”	3’-5”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-11”	2’-11”	3’-3”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-4”	3’-1”	2’-10”

*See page 2 for standard notes.

Load / Span Data

E-36-W
Aluminum Perforated — 0.040 in

Ix: 0.027 in^4/ft
Sx: 0.048 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-2”	4’-2”	4’-8”	55	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-5”	3’-4”	3’-0”
25	Stress	3’-9”	3’-9”	4’-2”	60	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-4”	3’-11”		Deflection	2’-5”	3’-3”	2’-11”
30	Stress	3’-5”	3’-5”	3’-10”	65	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-4”	3’-2”	2’-10”
35	Stress	3’-2”	3’-2”	3’-6”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-3”	3’-1”	2’-10”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-0”	2’-9”
45	Stress	2’-9”	2’-9”	3’-1”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-2”	2’-11”	2’-8”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-6”	3’-5”	3’-2”		Deflection	2’-1”	2’-10”	2’-8”

E-36-W
Aluminum Perforated — 0.040 in

Ix: 0.018 in^4/ft
Sx: 0.036 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-8”	3’-8”	4’-1”	55	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-0”	4’-0”	3’-9”		Deflection	2’-2”	2’-11”	2’-8”
25	Stress	3’-3”	3’-3”	3’-8”	60	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-1”	2’-10”	2’-7”
30	Stress	3’-0”	3’-0”	3’-4”	65	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-0”	2’-9”	2’-6”
35	Stress	2’-9”	2’-9”	3’-1”	70	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-8”	2’-5”
40	Stress	2’-7”	2’-7”	2’-10”	75	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-7”	2’-5”
45	Stress	2’-5”	2’-5”	2’-8”	80	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-11”	2’-7”	2’-4”
50	Stress	2’-4”	2’-4”	2’-7”	85	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-2”	3’-0”	2’-9”		Deflection	1’-10”	2’-6”	2’-3”

*See page 2 for standard notes.

E-36-W
Aluminum Perforated

0.050 in

Ix: 0.077 in^4/ft
Sx: 0.12 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-7”	6’-7”	7’-5”	55	Stress	4’-0”	4’-0”	4’-6”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-6”	4’-8”	4’-4”
25	Stress	5’-11”	5’-11”	6’-7”	60	Stress	3’-10”	3’-10”	4’-3”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-4”	4’-7”	4’-2”
30	Stress	5’-5”	5’-5”	6’-1”	65	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-3”	4’-5”	4’-1”
35	Stress	5’-0”	5’-0”	5’-7”	70	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-2”	4’-4”	4’-0”
40	Stress	4’-8”	4’-8”	5’-3”	75	Stress	3’-5”	3’-5”	3’-10”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	4’-5”	4’-5”	4’-11”	80	Stress	3’-4”	3’-4”	3’-8”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	4’-2”	4’-2”	4’-8”	85	Stress	3’-3”	3’-3”	3’-7”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	3’-0”	4’-1”	3’-9”

E-36-W
Aluminum Perforated

0.050 in

Ix: 0.058 in^4/ft
Sx: 0.089 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-9”	5’-9”	6’-5”	55	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-2”	4’-3”	3’-11”
25	Stress	5’-1”	5’-1”	5’-9”	60	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-1”	4’-2”	3’-10”
30	Stress	4’-8”	4’-8”	5’-3”	65	Stress	3’-2”	3’-2”	3’-7”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-0”	4’-0”	3’-8”
35	Stress	4’-4”	4’-4”	4’-10”	70	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-8”	4’-11”	4’-7”		Deflection	2’-11”	3’-11”	3’-7”
40	Stress	4’-1”	4’-1”	4’-6”	75	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-10”	3’-10”	3’-6”
45	Stress	3’-10”	3’-10”	4’-3”	80	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-9”	3’-9”	3’-5”
50	Stress	3’-7”	3’-7”	4’-1”	85	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-9”	3’-8”	3’-5”

*See page 2 for standard notes.

Load / Span Data

E-36-W
Aluminum Perforated — 0.050 in

Ix: 0.048 in^4/ft
Sx: 0.076 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-11”	55	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-0”	4’-0”	3’-8”
25	Stress	4’-9”	4’-9”	5’-3”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-11”	3’-11”	3’-7”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	2’-10”	3’-9”	3’-6”
35	Stress	4’-0”	4’-0”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-9”	3’-8”	3’-5”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-8”	3’-7”	3’-4”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-3”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-1”	4’-2”	3’-9”		Deflection	2’-7”	3’-5”	3’-2”

E-36-W
Aluminum Perforated — 0.050 in

Ix: 0.044 in^4/ft
Sx: 0.071 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-1”	5’-1”	5’-9”	55	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	2’-10”	3’-10”	3’-7”
25	Stress	4’-7”	4’-7”	5’-1”	60	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	2’-9”	3’-9”	3’-5”
30	Stress	4’-2”	4’-2”	4’-8”	65	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-9”	3’-8”	3’-4”
35	Stress	3’-10”	3’-10”	4’-4”	70	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-8”	3’-7”	3’-3”
40	Stress	3’-7”	3’-7”	4’-1”	75	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-2”	4’-4”	3’-11”		Deflection	2’-7”	3’-6”	3’-2”
45	Stress	3’-5”	3’-5”	3’-10”	80	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-5”	3’-2”
50	Stress	3’-3”	3’-3”	3’-7”	85	Stress	2’-6”	2’-6”	2’-9”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”

*See page 2 for standard notes.

E-36-W
Aluminum Perforated

0.050 in

Ix: 0.034 in^4/ft
Sx: 0.059 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-8”	4’-8”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-3”
25	Stress	4’-2”	4’-2”	4’-8”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-6”	3’-2”
30	Stress	3’-10”	3’-10”	4’-3”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-6”	3’-4”	3’-1”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-6”	2’-11”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	4’-1”	3’-0”
40	Stress	3’-4”	3’-4”	3’-8”	75	Stress	2’-5”	2’-5”	2’-8”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-5”	3’-3”	2’-11”
45	Stress	3’-1”	3’-1”	3’-6”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	2’-11”	2’-11”	3’-4”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”

E-36-W
Aluminum Perforated

0.050 in

Ix: 0.023 in^4/ft
Sx: 0.045 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-1”	4’-1”	4’-6”	55	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-4”	3’-1”	2’-10”
25	Stress	3’-7”	3’-7”	4’-1”	60	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-3”	3’-0”	2’-9”
30	Stress	3’-4”	3’-4”	3’-8”	65	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-2”	2’-11”	2’-8”
35	Stress	3’-1”	3’-1”	3’-5”	70	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-1”	2’-10”	2’-8”
40	Stress	2’-10”	2’-10”	3’-2”	75	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-7”	3’-5”	3’-2”		Deflection	2’-1”	2’-10”	2’-7”
45	Stress	2’-8”	2’-8”	3’-0”	80	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-0”	2’-9”	2’-6”
50	Stress	2’-7”	2’-7”	2’-10”	85	Stress	1’-12”	1’-12”	2’-2”
	Deflection	2’-5”	3’-3”	2’-11”		Deflection	2’-0”	2’-8”	2’-6”

*See page 2 for standard notes.

Load / Span Data

VB-31-S
Aluminum Perforated — 0.032 in

Ix: 0.185 in^4/ft
Sx: 0.177 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-1”	8’-1”	9’-0”	55	Stress	4’-10”	4’-10”	5’-5”
	Deflection	6’-6”	8’-9”	8’-1”		Deflection	4’-8”	6’-3”	5’-9”
25	Stress	7’-2”	7’-2”	8’-1”	60	Stress	4’-8”	4’-8”	5’-2”
	Deflection	6’-0”	8’-2”	7’-6”		Deflection	4’-6”	6’-1”	5’-7”
30	Stress	6’-7”	6’-7”	7’-4”	65	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-8”	7’-8”	7’-0”		Deflection	4’-5”	5’-11”	5’-5”
35	Stress	6’-1”	6’-1”	6’-10”	70	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-5”	7’-3”	6’-8”		Deflection	4’-3”	5’-9”	5’-4”
40	Stress	5’-8”	5’-8”	6’-4”	75	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	4’-2”	5’-8”	5’-2”
45	Stress	5’-4”	5’-4”	6’-0”	80	Stress	4’-0”	4’-0”	4’-6”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	4’-1”	5’-6”	5’-1”
50	Stress	5’-1”	5’-1”	5’-8”	85	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-9”	6’-6”	5’-11”		Deflection	4’-0”	5’-5”	5’-0”

VB-31-S
Aluminum Perforated — 0.032 in

Ix: 0.14 in^4/ft
Sx: 0.132 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-11”	6’-11”	7’-9”	55	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-11”	8’-0”	7’-4”		Deflection	4’-3”	5’-8”	5’-3”
25	Stress	6’-3”	6’-3”	6’-11”	60	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-6”	7’-5”	6’-10”		Deflection	4’-1”	5’-6”	5’-1”
30	Stress	5’-8”	5’-8”	6’-4”	65	Stress	3’-10”	3’-10”	4’-4”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	4’-0”	5’-5”	4’-11”
35	Stress	5’-3”	5’-3”	5’-11”	70	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-11”	5’-3”	4’-10”
40	Stress	4’-11”	4’-11”	5’-6”	75	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-10”	5’-2”	4’-9”
45	Stress	4’-8”	4’-8”	5’-2”	80	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-9”	5’-0”	4’-7”
50	Stress	4’-5”	4’-5”	4’-11”	85	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-8”	4’-11”	4’-6”

*See page 2 for standard notes.

VB-31-S
Aluminum Perforated

0.032 in

Ix: 0.115 in^4/ft
Sx: 0.113 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-5”	6’-5”	7’-2”	55	Stress	3’-11”	3’-11”	4’-4”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	3’-11”	5’-4”	4’-11”
25	Stress	5’-9”	5’-9”	6’-5”	60	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	3’-10”	5’-2”	4’-9”
30	Stress	5’-3”	5’-3”	5’-11”	65	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-9”	5’-1”	4’-8”
35	Stress	4’-10”	4’-10”	5’-5”	70	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-7”	6’-3”	5’-8”		Deflection	3’-8”	4’-11”	4’-6”
40	Stress	4’-7”	4’-7”	5’-1”	75	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-7”	4’-10”	4’-5”
45	Stress	4’-3”	4’-3”	4’-10”	80	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-6”	4’-9”	4’-4”
50	Stress	4’-1”	4’-1”	4’-7”	85	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-5”	4’-7”	4’-3”

VB-31-S
Aluminum Perforated

0.032 in

Ix: 0.104 in^4/ft
Sx: 0.106 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-3”	6’-3”	6’-11”	55	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-7”	5’-7”	6’-3”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-9”	5’-0”	4’-7”
30	Stress	5’-1”	5’-1”	5’-8”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-7”	4’-11”	4’-6”
35	Stress	4’-8”	4’-8”	5’-3”	70	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-5”
40	Stress	4’-5”	4’-5”	4’-11”	75	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-2”	4’-2”	4’-8”	80	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-5”	4’-7”	4’-2”
50	Stress	3’-11”	3’-11”	4’-5”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-4”	4’-6”	4’-1”

*See page 2 for standard notes.

Load / Span Data

VB-31-S
Aluminum Perforated

0.032 in

Ix: 0.082 in^4/ft
Sx: 0.088 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-8”	5’-8”	6’-4”	55	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-6”	4’-9”	4’-5”
25	Stress	5’-1”	5’-1”	5’-8”	60	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	4’-8”	4’-8”	5’-2”	65	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	4’-4”	4’-4”	4’-10”	70	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	4’-0”	4’-0”	4’-6”	75	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-2”	4’-4”	3’-11”
45	Stress	3’-9”	3’-9”	4’-3”	80	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-3”	3’-10”
50	Stress	3’-7”	3’-7”	4’-0”	85	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-1”	4’-1”	3’-9”

VB-31-S
Aluminum Perforated

0.032 in

Ix: 0.054 in^4/ft
Sx: 0.066 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-5”	4’-5”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	4’-0”	4’-0”	4’-6”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	3’-9”	3’-9”	4’-2”	70	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-9”	3’-8”	3’-4”
50	Stress	3’-1”	3’-1”	3’-6”	85	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-4”

*See page 2 for standard notes.

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.13 in^4/ft
Sx: 0.215 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-10”	8’-10”	9’-11”	55	Stress	5’-4”	5’-4”	6’-0”
	Deflection	5’-9”	7’-10”	7’-2”		Deflection	4’-1”	5’-7”	5’-1”
25	Stress	7’-11”	7’-11”	8’-10”	60	Stress	5’-1”	5’-1”	5’-9”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	4’-0”	5’-5”	5’-0”
30	Stress	7’-3”	7’-3”	8’-1”	65	Stress	4’-11”	4’-11”	5’-6”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-11”	5’-3”	4’-10”
35	Stress	6’-8”	6’-8”	7’-6”	70	Stress	4’-9”	4’-9”	5’-4”
	Deflection	4’-10”	6’-6”	5’-11”		Deflection	3’-10”	5’-2”	4’-9”
40	Stress	6’-3”	6’-3”	7’-0”	75	Stress	4’-7”	4’-7”	5’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-0”	4’-7”
45	Stress	5’-11”	5’-11”	6’-7”	80	Stress	4’-5”	4’-5”	4’-11”
	Deflection	4’-5”	5’-11”	5’-6”		Deflection	3’-8”	4’-11”	4’-6”
50	Stress	5’-7”	5’-7”	6’-3”	85	Stress	4’-4”	4’-4”	4’-10”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-7”	4’-10”	4’-5”

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.175 in^4/ft
Sx: 0.165 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-9”	7’-9”	8’-8”	55	Stress	4’-8”	4’-8”	5’-3”
	Deflection	6’-4”	8’-7”	7’-11”		Deflection	4’-7”	6’-2”	5’-8”
25	Stress	7’-0”	7’-0”	7’-9”	60	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-11”	8’-0”	7’-4”		Deflection	4’-5”	6’-0”	5’-6”
30	Stress	6’-4”	6’-4”	7’-1”	65	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-4”	5’-10”	5’-4”
35	Stress	5’-11”	5’-11”	6’-7”	70	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-3”	7’-2”	6’-7”		Deflection	4’-2”	5’-8”	5’-2”
40	Stress	5’-6”	5’-6”	6’-2”	75	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	4’-1”	5’-6”	5’-1”
45	Stress	5’-2”	5’-2”	5’-10”	80	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	4’-0”	5’-5”	5’-0”
50	Stress	4’-11”	4’-11”	5’-6”	85	Stress	3’-9”	3’-9”	4’-3”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-11”	5’-4”	4’-11”

*See page 2 for standard notes.

Load / Span Data

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.144 in^4/ft
Sx: 0.141 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-2”	7’-2”	8’-1”	55	Stress	4’-4”	4’-4”	4’-10”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-3”	5’-9”	5’-3”
25	Stress	6’-5”	6’-5”	7’-2”	60	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-2”	5’-7”	5’-2”
30	Stress	5’-10”	5’-10”	6’-7”	65	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-0”	5’-5”	5’-0”
35	Stress	5’-5”	5’-5”	6’-1”	70	Stress	3’-10”	3’-10”	4’-4”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-11”	5’-4”	4’-11”
40	Stress	5’-1”	5’-1”	5’-8”	75	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-10”	5’-2”	4’-9”
45	Stress	4’-10”	4’-10”	5’-4”	80	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-1”	4’-8”
50	Stress	4’-7”	4’-7”	5’-1”	85	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-8”	5’-0”	4’-7”

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.13 in^4/ft
Sx: 0.132 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-11”	6’-11”	7’-9”	55	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-9”	7’-10”	7’-2”		Deflection	4’-2”	5’-7”	5’-1”
25	Stress	6’-3”	6’-3”	6’-11”	60	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	4’-0”	5’-5”	5’-0”
30	Stress	5’-8”	5’-8”	6’-4”	65	Stress	3’-10”	3’-10”	4’-4”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-11”	5’-3”	4’-10”
35	Stress	5’-3”	5’-3”	5’-11”	70	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-10”	6’-6”	5’-11”		Deflection	3’-10”	5’-2”	4’-9”
40	Stress	4’-11”	4’-11”	5’-6”	75	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-0”	4’-7”
45	Stress	4’-8”	4’-8”	5’-2”	80	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	5’-11”	5’-6”		Deflection	3’-8”	4’-11”	4’-6”
50	Stress	4’-5”	4’-5”	4’-11”	85	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-7”	4’-10”	4’-5”

*See page 2 for standard notes.

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.102 in^4/ft
Sx: 0.109 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-4”	6’-4”	7’-1”	55	Stress	3’-10”	3’-10”	4’-3”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-8”	5’-8”	6’-4”	60	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	5’-2”	5’-2”	5’-9”	65	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-6”
35	Stress	4’-9”	4’-9”	5’-4”	70	Stress	3’-5”	3’-5”	3’-9”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	4’-6”	4’-6”	5’-0”	75	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-3”	4’-3”	4’-9”	80	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	4’-0”	4’-0”	4’-6”	85	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-3”	4’-5”	4’-1”

VB-31-S
Aluminum Perforated

0.040 in

Ix: 0.067 in^4/ft
Sx: 0.083 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-6”	5’-6”	6’-2”	55	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-4”	4’-6”	4’-1”
25	Stress	4’-11”	4’-11”	5’-6”	60	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-3”	4’-4”	4’-0”
30	Stress	4’-6”	4’-6”	5’-0”	65	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-2”	4’-3”	3’-11”
35	Stress	4’-2”	4’-2”	4’-8”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-1”	3’-9”
40	Stress	3’-11”	3’-11”	4’-4”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	3’-8”	3’-8”	4’-1”	80	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-6”	3’-6”	3’-11”	85	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-10”	3’-7”

*See page 2 for standard notes.

Load / Span Data

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.289 in^4/ft
Sx: 0.276 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	10’-1”	10’-1”	11’-3”	55	Stress	6’-1”	6’-1”	6’-9”
	Deflection	7’-6”	10’-2”	9’-4”		Deflection	5’-5”	7’-3”	6’-8”
25	Stress	9’-0”	9’-0”	10’-1”	60	Stress	5’-10”	5’-10”	6’-6”
	Deflection	7’-0”	9’-5”	8’-8”		Deflection	5’-3”	7’-1”	6’-6”
30	Stress	8’-3”	8’-3”	9’-2”	65	Stress	5’-7”	5’-7”	6’-3”
	Deflection	6’-7”	8’-11”	8’-2”		Deflection	5’-1”	6’-10”	6’-4”
35	Stress	7’-7”	7’-7”	8’-6”	70	Stress	5’-5”	5’-5”	6’-0”
	Deflection	6’-3”	8’-5”	7’-9”		Deflection	5’-0”	6’-8”	6’-2”
40	Stress	7’-1”	7’-1”	8’-0”	75	Stress	5’-2”	5’-2”	5’-10”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-10”	6’-7”	6’-0”
45	Stress	6’-9”	6’-9”	7’-6”	80	Stress	5’-0”	5’-0”	5’-8”
	Deflection	5’-9”	7’-9”	7’-2”		Deflection	4’-9”	6’-5”	5’-11”
50	Stress	6’-4”	6’-4”	7’-1”	85	Stress	4’-11”	4’-11”	5’-6”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-8”	6’-3”	5’-9”

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.217 in^4/ft
Sx: 0.206 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-8”	8’-8”	9’-9”	55	Stress	5’-3”	5’-3”	5’-10”
	Deflection	6’-10”	9’-3”	8’-6”		Deflection	4’-11”	6’-7”	6’-1”
25	Stress	7’-9”	7’-9”	8’-8”	60	Stress	5’-0”	5’-0”	5’-7”
	Deflection	6’-4”	8’-7”	7’-11”		Deflection	4’-9”	6’-5”	5’-11”
30	Stress	7’-1”	7’-1”	7’-11”	65	Stress	4’-10”	4’-10”	5’-5”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-7”	6’-3”	5’-9”
35	Stress	6’-7”	6’-7”	7’-4”	70	Stress	4’-8”	4’-8”	5’-2”
	Deflection	5’-8”	7’-8”	7’-1”		Deflection	4’-6”	6’-1”	5’-7”
40	Stress	6’-2”	6’-2”	6’-11”	75	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-5”	5’-11”	5’-6”
45	Stress	5’-10”	5’-10”	6’-6”	80	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-4”	5’-10”	5’-4”
50	Stress	5’-6”	5’-6”	6’-2”	85	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	4’-3”	5’-9”	5’-3”

*See page 2 for standard notes.

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.18 in^4/ft
Sx: 0.177 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	8’-1”	8’-1”	9’-0”	55	Stress	4’-10”	4’-10”	5’-5”
	Deflection	6’-5”	8’-8”	8’-0”		Deflection	4’-7”	6’-2”	5’-8”
25	Stress	7’-2”	7’-2”	8’-1”	60	Stress	4’-8”	4’-8”	5’-2”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-6”	6’-0”	5’-6”
30	Stress	6’-7”	6’-7”	7’-4”	65	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-7”	7’-7”	7’-0”		Deflection	4’-4”	5’-10”	5’-5”
35	Stress	6’-1”	6’-1”	6’-10”	70	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-4”	7’-3”	6’-7”		Deflection	4’-3”	5’-9”	5’-3”
40	Stress	5’-8”	5’-8”	6’-4”	75	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	4’-2”	5’-7”	5’-2”
45	Stress	5’-4”	5’-4”	6’-0”	80	Stress	4’-0”	4’-0”	4’-6”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	4’-1”	5’-6”	5’-0”
50	Stress	5’-1”	5’-1”	5’-8”	85	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	4’-0”	5’-4”	4’-11”

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.163 in^4/ft
Sx: 0.165 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-9”	7’-9”	8’-8”	55	Stress	4’-8”	4’-8”	5’-3”
	Deflection	6’-3”	8’-5”	7’-9”		Deflection	4’-5”	6’-0”	5’-6”
25	Stress	6’-11”	6’-11”	7’-9”	60	Stress	4’-6”	4’-6”	5’-0”
	Deflection	5’-9”	7’-10”	7’-2”		Deflection	4’-4”	5’-10”	5’-4”
30	Stress	6’-4”	6’-4”	7’-1”	65	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-2”	5’-8”	5’-3”
35	Stress	5’-11”	5’-11”	6’-7”	70	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	4’-1”	5’-6”	5’-1”
40	Stress	5’-6”	5’-6”	6’-2”	75	Stress	4’-0”	4’-0”	4’-6”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	4’-0”	5’-5”	5’-0”
45	Stress	5’-2”	5’-2”	5’-10”	80	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-11”	5’-4”	4’-10”
50	Stress	4’-11”	4’-11”	5’-6”	85	Stress	3’-9”	3’-9”	4’-3”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-10”	5’-2”	4’-9”

*See page 2 for standard notes.

Load / Span Data

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.128 in^4/ft
Sx: 0.1374 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-1”	7’-1”	7’-11”	55	Stress	4’-3”	4’-3”	4’-9”
	Deflection	5’-9”	7’-9”	7’-1”		Deflection	4’-1”	5’-6”	5’-1”
25	Stress	6’-4”	6’-4”	7’-1”	60	Stress	4’-1”	4’-1”	4’-7”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	4’-0”	5’-5”	4’-11”
30	Stress	5’-10”	5’-10”	6’-6”	65	Stress	3’-11”	3’-11”	4’-5”
	Deflection	5’-0”	6’-9”	6’-3”		Deflection	3’-11”	5’-3”	4’-10”
35	Stress	5’-4”	5’-4”	6’-0”	70	Stress	3’-10”	3’-10”	4’-3”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-9”	5’-1”	4’-8”
40	Stress	5’-0”	5’-0”	5’-7”	75	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-8”	5’-0”	4’-7”
45	Stress	4’-9”	4’-9”	5’-3”	80	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-7”	4’-11”	4’-6”
50	Stress	4’-6”	4’-6”	5’-0”	85	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-7”	4’-9”	4’-5”

VB-31-S
Aluminum Perforated

0.050 in

Ix: 0.0846 in^4/ft
Sx: 0.1032 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-11”	55	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-7”	4’-10”	4’-5”
25	Stress	5’-6”	5’-6”	6’-2”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-6”	4’-8”	4’-4”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-5”	4’-7”	4’-2”
35	Stress	4’-8”	4’-8”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-4”	4’-5”	4’-1”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	3’-3”	4’-4”	4’-0”
45	Stress	4’-1”	4’-1”	4’-7”	80	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-2”	4’-3”	3’-11”
50	Stress	3’-11”	3’-11”	4’-4”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-1”	4’-2”	3’-10”

*See page 2 for standard notes.

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0535 in^4/ft
Sx: 0.1048 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-11”	55	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	5’-7”	5’-7”	6’-2”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	5’-1”	5’-1”	5’-8”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	4’-8”	4’-8”	5’-3”	70	Stress	3’-4”	3’-4”	3’-8”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	4’-5”	4’-5”	4’-11”	75	Stress	3’-2”	3’-2”	3’-7”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	4’-2”	4’-2”	4’-7”	80	Stress	3’-1”	3’-1”	3’-6”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-8”	3’-4”
50	Stress	3’-11”	3’-11”	4’-5”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-3”

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0405 in^4/ft
Sx: 0.0782 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	6’-0”	55	Stress	3’-3”	3’-3”	3’-7”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	2’-10”	3’-9”	3’-6”
25	Stress	4’-9”	4’-9”	5’-4”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-9”	3’-8”	3’-4”
30	Stress	4’-4”	4’-4”	4’-11”	65	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-8”	3’-7”	3’-3”
35	Stress	4’-1”	4’-1”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-7”	3’-6”	3’-2”
40	Stress	3’-9”	3’-9”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-6”	3’-5”	3’-1”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-0”	4’-0”	3’-8”		Deflection	2’-6”	3’-4”	3’-1”
50	Stress	3’-5”	3’-5”	3’-9”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”

*See page 2 for standard notes.

Load / Span Data

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0334 in^4/ft
Sx: 0.0669 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	3’-8”	4’-11”	4’-7”		Deflection	2’-7”	3’-6”	3’-3”
25	Stress	4’-5”	4’-5”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-7”	3’-5”	3’-2”
30	Stress	4’-1”	4’-1”	4’-6”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-2”	4’-4”	4’-0”		Deflection	2’-6”	3’-4”	3’-1”
35	Stress	3’-9”	3’-9”	4’-2”	70	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-1”	4’-1”	3’-9”		Deflection	2’-5”	3’-3”	3’-0”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-7”	2’-7”	2’-10”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-4”	3’-2”	2’-11”
45	Stress	3’-4”	3’-4”	3’-8”	80	Stress	2’-6”	2’-6”	2’-9”
	Deflection	2’-10”	3’-9”	3’-6”		Deflection	2’-4”	3’-1”	2’-10”
50	Stress	3’-2”	3’-2”	3’-6”	85	Stress	2’-5”	2’-5”	2’-8”
	Deflection	2’-8”	3’-8”	3’-4”		Deflection	2’-3”	3’-1”	2’-10”

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0302 in^4/ft
Sx: 0.0626 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-4”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-6”	3’-5”	3’-2”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-6”	3’-4”	3’-1”
30	Stress	3’-11”	3’-11”	4’-4”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	3’-7”	3’-7”	4’-1”	70	Stress	2’-7”	2’-7”	2’-10”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	3’-5”	3’-5”	3’-9”	75	Stress	2’-6”	2’-6”	2’-9”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-3”	3’-1”	2’-10”
45	Stress	3’-2”	3’-2”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	2’-9”	3’-8”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”
50	Stress	3’-0”	3’-0”	3’-5”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-2”	3’-0”	2’-9”

*See page 2 for standard notes.

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0237 in^4/ft
Sx: 0.0521 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-4”	4’-4”	4’-11”	55	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-4”	3’-2”	2’-11”
25	Stress	3’-11”	3’-11”	4’-4”	60	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-3”	3’-1”	2’-10”
30	Stress	3’-7”	3’-7”	4’-0”	65	Stress	2’-5”	2’-5”	2’-9”
	Deflection	2’-10”	3’-10”	3’-7”		Deflection	2’-3”	3’-0”	2’-9”
35	Stress	3’-4”	3’-4”	3’-8”	70	Stress	2’-4”	2’-4”	2’-7”
	Deflection	2’-9”	3’-8”	3’-4”		Deflection	2’-2”	2’-11”	2’-8”
40	Stress	3’-1”	3’-1”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-1”	2’-10”	2’-7”
45	Stress	2’-11”	2’-11”	3’-3”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	2’-1”	2’-9”	2’-7”
50	Stress	2’-9”	2’-9”	3’-1”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	2’-0”	2’-9”	2’-6”

VB-36-W
Aluminum Perforated

0.032 in

Ix: 0.0157 in^4/ft
Sx: 0.0391 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-3”	55	Stress	2’-3”	2’-3”	2’-7”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-0”	2’-9”	2’-6”
25	Stress	3’-5”	3’-5”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-8”	3’-7”	3’-3”		Deflection	2’-0”	2’-8”	2’-5”
30	Stress	3’-1”	3’-1”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-6”	3’-4”	3’-1”		Deflection	1’-11”	2’-7”	2’-5”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	2’-0”	2’-0”	2’-3”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-6”	2’-4”
40	Stress	2’-8”	2’-8”	3’-0”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-10”	2’-6”	2’-3”
45	Stress	2’-6”	2’-6”	2’-10”	80	Stress	1’-11”	1’-11”	2’-1”
	Deflection	2’-2”	2’-11”	2’-8”		Deflection	1’-10”	2’-5”	2’-3”
50	Stress	2’-5”	2’-5”	2’-8”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-1”	2’-10”	2’-7”		Deflection	1’-9”	2’-5”	2’-2”

*See page 2 for standard notes.

Load / Span Data

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0669 in^4/ft
Sx: 0.1243 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-9”	5’-9”	6’-5”	55	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-4”	4’-6”	4’-1”
25	Stress	5’-2”	5’-2”	5’-9”	60	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-3”	4’-4”	4’-0”
30	Stress	4’-8”	4’-8”	5’-3”	65	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-1”	5’-5”	5’-0”		Deflection	3’-1”	4’-3”	3’-10”
35	Stress	4’-4”	4’-4”	4’-10”	70	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-1”	4’-1”	3’-9”
40	Stress	4’-1”	4’-1”	4’-7”	75	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	3’-10”	3’-10”	4’-3”	80	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-6”	4’-9”	4’-5”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	3’-8”	3’-8”	4’-1”	85	Stress	2’-10”	2’-10”	3’-1”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-10”	3’-10”	3’-7”

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0506 in^4/ft
Sx: 0.0957 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-1”	5’-1”	5’-8”	55	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-3”	5’-8”	5’-3”		Deflection	3’-0”	4’-1”	3’-9”
25	Stress	4’-6”	4’-6”	5’-1”	60	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	2’-11”	3’-11”	3’-8”
30	Stress	4’-1”	4’-1”	4’-7”	65	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-10”	3’-10”	3’-6”
35	Stress	3’-10”	3’-10”	4’-3”	70	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-9”	3’-9”	3’-5”
40	Stress	3’-7”	3’-7”	4’-0”	75	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-9”	3’-8”	3’-4”
45	Stress	3’-4”	3’-4”	3’-9”	80	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-8”	3’-7”	3’-4”
50	Stress	3’-2”	3’-2”	3’-7”	85	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-6”	3’-3”

*See page 2 for standard notes.

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0417 in^4/ft
Sx: 0.0819 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-8”	4’-8”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-10”	3’-10”	3’-6”
25	Stress	4’-2”	4’-2”	4’-8”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-8”	4’-11”	4’-7”		Deflection	2’-9”	3’-8”	3’-5”
30	Stress	3’-10”	3’-10”	4’-3”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-8”	3’-7”	3’-4”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-7”	3’-6”	3’-3”
40	Stress	3’-4”	3’-4”	3’-8”	75	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-5”	3’-2”
45	Stress	3’-1”	3’-1”	3’-6”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
50	Stress	2’-11”	2’-11”	3’-4”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-4”	3’-0”

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0378 in^4/ft
Sx: 0.0765 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-6”	4’-6”	5’-1”	55	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-9”	3’-8”	3’-5”
25	Stress	4’-0”	4’-0”	4’-6”	60	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-8”	3’-7”	3’-3”
30	Stress	3’-8”	3’-8”	4’-1”	65	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-7”	3’-6”	3’-2”
35	Stress	3’-5”	3’-5”	3’-10”	70	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-6”	3’-5”	3’-1”
40	Stress	3’-2”	3’-2”	3’-7”	75	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
45	Stress	3’-0”	3’-0”	3’-4”	80	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”
50	Stress	2’-10”	2’-10”	3’-2”	85	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”

*See page 2 for standard notes.

Load / Span Data

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0296 in^4/ft
Sx: 0.0637 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-1”	4’-1”	4’-7”	55	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-6”	3’-5”	3’-1”
25	Stress	3’-8”	3’-8”	3’-8”	60	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-5”		Deflection	2’-5”	3’-4”	3’-0”
30	Stress	3’-4”	3’-4”	3’-9”	65	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-3”	2’-11”
35	Stress	3’-1”	3’-1”	3’-6”	70	Stress	2’-2”	2’-2”	2’-6”
	Deflection	2’-11”	3’-11”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	2’-11”	2’-11”	3’-3”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-10”	3’-9”	3’-6”		Deflection	2’-3”	3’-1”	2’-10”
45	Stress	2’-9”	2’-9”	3’-1”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-8”	3’-8”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”
50	Stress	2’-7”	2’-7”	2’-11”	85	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-2”	2’-11”	2’-8”

VB-36-W
Aluminum Perforated

0.040 in

Ix: 0.0196 in^4/ft
Sx: 0.0478 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-7”	3’-7”	4’-0”	55	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-2”	3’-0”	2’-9”
25	Stress	3’-2”	3’-2”	3’-7”	60	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-2”	2’-11”	2’-8”
30	Stress	2’-11”	2’-11”	3’-3”	65	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-1”	2’-10”	2’-7”
35	Stress	2’-8”	2’-8”	3’-0”	70	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-7”	3’-5”	3’-2”		Deflection	2’-0”	2’-9”	2’-6”
40	Stress	2’-6”	2’-6”	2’-10”	75	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-5”	3’-4”	3’-0”		Deflection	2’-0”	2’-8”	2’-5”
45	Stress	2’-5”	2’-5”	2’-8”	80	Stress	1’-9”	1’-9”	2’-0”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-7”	2’-5”
50	Stress	2’-3”	2’-3”	2’-6”	85	Stress	1’-9”	1’-9”	1’-11”
	Deflection	2’-3”	3’-1”	2’-10”		Deflection	1’-11”	2’-7”	2’-4”

*See page 2 for standard notes.

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0729 in^4/ft
Sx: 0.1397 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-1”	6’-1”	6’-10”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-3”
25	Stress	5’-6”	5’-6”	6’-1”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-4”	4’-6”	4’-1”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-5”	3’-5”	3’-9”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-3”	4’-4”	4’-0”
35	Stress	4’-7”	4’-7”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-6”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	4’-1”	4’-1”	4’-7”	80	Stress	3’-1”	3’-1”	3’-5”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”
50	Stress	3’-10”	3’-10”	4’-4”	85	Stress	2’-12”	2’-12”	3’-4”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0551 in^4/ft
Sx: 0.1043 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-3”	5’-3”	5’-11”	55	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-4”	5’-10”	5’-5”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-9”	4’-9”	5’-3”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-0”	4’-1”	3’-9”
30	Stress	4’-4”	4’-4”	4’-10”	65	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-8”
35	Stress	4’-0”	4’-0”	4’-5”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	2’-10”	3’-10”	3’-7”
40	Stress	3’-9”	3’-9”	4’-2”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-10”	3’-9”	3’-6”
45	Stress	3’-6”	3’-6”	3’-11”	80	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-4”	4’-6”	4’-1”		Deflection	2’-9”	3’-8”	3’-5”
50	Stress	3’-4”	3’-4”	3’-9”	85	Stress	2’-7”	2’-7”	2’-10”
	Deflection	3’-2”	4’-4”	4’-0”		Deflection	2’-8”	3’-7”	3’-4”

*See page 2 for standard notes.

Load / Span Data

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0454 in^4/ft
Sx: 0.0892 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	2’-11”	3’-11”	3’-7”
25	Stress	4’-4”	4’-4”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-10”	3’-10”	3’-6”
30	Stress	4’-0”	4’-0”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-9”	3’-8”	3’-5”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-8”	3’-7”	3’-4”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-7”	3’-6”	3’-3”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-6”	3’-2”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0412 in^4/ft
Sx: 0.0834 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-10”	3’-10”	3’-6”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-9”	3’-8”	3’-5”
30	Stress	3’-10”	3’-10”	4’-4”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-8”	3’-7”	3’-4”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-7”	3’-6”	3’-3”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-1”	4’-3”	3’-10”		Deflection	2’-6”	3’-5”	3’-2”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-3”	2’-3”	2’-7”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”

*See page 2 for standard notes.

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0323 in^4/ft
Sx: 0.0694 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-4”	4’-4”	4’-10”	55	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-7”	3’-6”	3’-3”
25	Stress	3’-10”	3’-10”	4’-4”	60	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-6”	3’-5”	3’-1”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-5”	3’-4”	3’-0”
35	Stress	3’-3”	3’-3”	3’-8”	70	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-5”	3’-3”	3’-0”
40	Stress	3’-1”	3’-1”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-4”	3’-2”	2’-11”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”
50	Stress	2’-9”	2’-9”	3’-1”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-8”	3’-7”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”

VB-36-W
Aluminum Perforated

0.050 in

Ix: 0.0214 in^4/ft
Sx: 0.0521 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-2”	55	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-3”	3’-1”	2’-10”
25	Stress	3’-4”	3’-4”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-2”	3’-0”	2’-9”
30	Stress	3’-1”	3’-1”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	2’-9”	3’-9”	3’-5”		Deflection	2’-2”	2’-11”	2’-8”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	1’-12”	1’-12”	2’-3”
	Deflection	2’-7”	3’-7”	3’-3”		Deflection	2’-1”	2’-10”	2’-7”
40	Stress	2’-8”	2’-8”	2’-11”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	2’-6”	3’-5”	3’-1”		Deflection	2’-0”	2’-9”	2’-6”
45	Stress	2’-6”	2’-6”	2’-9”	80	Stress	1’-10”	1’-10”	2’-1”
	Deflection	2’-5”	3’-3”	3’-0”		Deflection	2’-0”	2’-8”	2’-6”
50	Stress	2’-4”	2’-4”	2’-8”	85	Stress	1’-10”	1’-10”	2’-0”
	Deflection	2’-4”	3’-2”	2’-11”		Deflection	1’-11”	2’-8”	2’-5”

*See page 2 for standard notes.

Load / Span Data

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.116 in^4/ft
Sx: 0.137 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-0”	5’-0”	5’-7”	55	Stress	3’-0”	3’-0”	3’-4”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-0”	5’-4”	4’-11”
25	Stress	4’-5”	4’-5”	5’-0”	60	Stress	2’-11”	2’-11”	3’-3”
	Deflection	5’-2”	7’-0”	6’-5”		Deflection	3’-10”	5’-2”	4’-9”
30	Stress	4’-1”	4’-1”	4’-7”	65	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-9”	5’-1”	4’-8”
35	Stress	3’-9”	3’-9”	4’-3”	70	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-8”	4’-11”	4’-7”
40	Stress	3’-6”	3’-6”	3’-11”	75	Stress	2’-7”	2’-7”	2’-11”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-7”	4’-10”	4’-5”
45	Stress	3’-4”	3’-4”	3’-9”	80	Stress	2’-6”	2’-6”	2’-9”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-6”	4’-9”	4’-4”
50	Stress	3’-2”	3’-2”	3’-6”	85	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-5”	4’-8”	4’-3”

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.088 in^4/ft
Sx: 0.102 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-4”	4’-4”	4’-10”	55	Stress	2’-7”	2’-7”	2’-11”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-7”	4’-11”	4’-6”
25	Stress	3’-10”	3’-10”	4’-4”	60	Stress	2’-6”	2’-6”	2’-9”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-6”	4’-9”	4’-4”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-5”	4’-7”	4’-3”
35	Stress	3’-3”	3’-3”	3’-8”	70	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-2”	5’-8”	5’-3”		Deflection	3’-4”	4’-6”	4’-2”
40	Stress	3’-1”	3’-1”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-3”	4’-5”	4’-1”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-2”	4’-4”	3’-11”
50	Stress	2’-9”	2’-9”	3’-1”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-9”	5’-0”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

*See page 2 for standard notes.

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.072 in^4/ft
Sx: 0.087 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-0”	4’-0”	4’-5”	55	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-2”
25	Stress	3’-7”	3’-7”	4’-0”	60	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-5”	5’-11”	5’-6”		Deflection	3’-4”	4’-5”	4’-1”
30	Stress	3’-3”	3’-3”	3’-8”	65	Stress	2’-2”	2’-2”	2’-6”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-2”	4’-4”	4’-0”
35	Stress	3’-0”	3’-0”	3’-4”	70	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	2’-10”	2’-10”	3’-2”	75	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	2’-8”	2’-8”	3’-0”	80	Stress	1’-12”	1’-12”	2’-3”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-0”	3’-9”
50	Stress	2’-6”	2’-6”	2’-10”	85	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.066 in^4/ft
Sx: 0.082 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-10”	3’-10”	4’-4”	55	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	3’-5”	3’-5”	3’-10”	60	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-4”	3’-11”
30	Stress	3’-2”	3’-2”	3’-6”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	2’-11”	2’-11”	3’-3”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	2’-9”	2’-9”	3’-1”	75	Stress	1’-12”	1’-12”	2’-3”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-0”	3’-8”
45	Stress	2’-7”	2’-7”	2’-10”	80	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	2’-5”	2’-5”	2’-9”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

*See page 2 for standard notes.

Load / Span Data

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.051 in^4/ft
Sx: 0.068 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-6”	3’-6”	3’-11”	55	Stress	2’-1”	2’-1”	2’-4”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-0”	4’-1”	3’-9”
25	Stress	3’-2”	3’-2”	3’-6”	60	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	2’-11”	4’-0”	3’-8”
30	Stress	2’-10”	2’-10”	3’-2”	65	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-10”	3’-10”	3’-7”
35	Stress	2’-8”	2’-8”	3’-0”	70	Stress	1’-11”	1’-11”	2’-1”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-10”	3’-9”	3’-6”
40	Stress	2’-6”	2’-6”	2’-9”	75	Stress	1’-10”	1’-10”	2’-0”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-9”	3’-8”	3’-5”
45	Stress	2’-4”	2’-4”	2’-7”	80	Stress	1’-9”	1’-9”	2’-0”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-8”	3’-7”	3’-4”
50	Stress	2’-3”	2’-3”	2’-6”	85	Stress	1’-8”	1’-8”	1’-11”
	Deflection	3’-1”	4’-3”	3’-10”		Deflection	2’-7”	3’-6”	3’-3”

Y-29-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.034 in^4/ft
Sx: 0.051 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-1”	3’-1”	3’-5”	55	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-8”	3’-7”	3’-3”
25	Stress	2’-9”	2’-9”	3’-1”	60	Stress	1’-9”	1’-9”	2’-0”
	Deflection	3’-5”	4’-8”	4’-3”		Deflection	2’-7”	3’-5”	3’-2”
30	Stress	2’-6”	2’-6”	2’-9”	65	Stress	1’-8”	1’-8”	1’-11”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-6”	3’-4”	3’-1”
35	Stress	2’-4”	2’-4”	2’-7”	70	Stress	1’-8”	1’-8”	1’-10”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
40	Stress	2’-2”	2’-2”	2’-5”	75	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-11”	3’-11”	3’-8”		Deflection	2’-5”	3’-3”	2’-11”
45	Stress	2’-0”	2’-0”	2’-3”	80	Stress	1’-6”	1’-6”	1’-8”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”
50	Stress	1’-11”	1’-11”	2’-2”	85	Stress	1’-6”	1’-6”	1’-8”
	Deflection	2’-9”	3’-8”	3’-5”		Deflection	2’-3”	3’-1”	2’-10”

*See page 2 for standard notes.

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.145 in^4/ft
Sx: 0.171 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-7”	5’-7”	6’-3”	55	Stress	3’-4”	3’-4”	3’-9”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-3”	5’-9”	5’-4”
25	Stress	5’-0”	5’-0”	5’-7”	60	Stress	3’-3”	3’-3”	3’-7”
	Deflection	5’-7”	7’-6”	6’-11”		Deflection	4’-2”	5’-7”	5’-2”
30	Stress	4’-7”	4’-7”	5’-1”	65	Stress	3’-1”	3’-1”	3’-5”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	4’-1”	5’-6”	5’-0”
35	Stress	4’-3”	4’-3”	4’-8”	70	Stress	2’-12”	2’-12”	3’-4”
	Deflection	5’-0”	6’-9”	6’-2”		Deflection	3’-11”	5’-4”	4’-11”
40	Stress	3’-11”	3’-11”	4’-5”	75	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-10”	5’-2”	4’-9”
45	Stress	3’-9”	3’-9”	4’-2”	80	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-9”	5’-1”	4’-8”
50	Stress	3’-6”	3’-6”	3’-11”	85	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-8”	5’-0”	4’-7”

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.11 in^4/ft
Sx: 0.127 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-10”	4’-10”	5’-5”	55	Stress	2’-11”	2’-11”	3’-3”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	3’-11”	5’-3”	4’-10”
25	Stress	4’-4”	4’-4”	4’-10”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	5’-1”	6’-10”	6’-3”		Deflection	3’-9”	5’-1”	4’-8”
30	Stress	3’-11”	3’-11”	4’-5”	65	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-8”	5’-0”	4’-7”
35	Stress	3’-8”	3’-8”	4’-1”	70	Stress	2’-7”	2’-7”	2’-10”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-7”	4’-10”	4’-5”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-9”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-6”	4’-9”	4’-4”
45	Stress	3’-2”	3’-2”	3’-7”	80	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-5”	4’-8”	4’-3”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-7”	4’-2”

*See page 2 for standard notes.

Load / Span Data

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.09 in^4/ft
Sx: 0.109 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-5”	4’-5”	5’-0”	55	Stress	2’-8”	2’-8”	3’-0”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-8”	4’-11”	4’-6”
25	Stress	4’-0”	4’-0”	4’-5”	60	Stress	2’-7”	2’-7”	2’-10”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-9”	4’-5”
30	Stress	3’-8”	3’-8”	4’-1”	65	Stress	2’-6”	2’-6”	2’-9”
	Deflection	4’-6”	6’-0”	5’-7”		Deflection	3’-5”	4’-8”	4’-3”
35	Stress	3’-4”	3’-4”	3’-9”	70	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-4”	4’-7”	4’-2”
40	Stress	3’-2”	3’-2”	3’-6”	75	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-4”	4’-5”	4’-1”
45	Stress	3’-0”	3’-0”	3’-4”	80	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-4”	4’-0”
50	Stress	2’-10”	2’-10”	3’-2”	85	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.082 in^4/ft
Sx: 0.102 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-4”	4’-4”	4’-10”	55	Stress	2’-7”	2’-7”	2’-11”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-6”	4’-9”	4’-5”
25	Stress	3’-10”	3’-10”	4’-4”	60	Stress	2’-6”	2’-6”	2’-9”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-8”	4’-3”
30	Stress	3’-6”	3’-6”	3’-11”	65	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-2”
35	Stress	3’-3”	3’-3”	3’-8”	70	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	3’-3”	4’-5”	4’-1”
40	Stress	3’-1”	3’-1”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-2”	4’-4”	3’-11”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-3”	3’-10”
50	Stress	2’-9”	2’-9”	3’-1”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-1”	4’-2”	3’-9”

*See page 2 for standard notes.

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.064 in^4/ft
Sx: 0.085 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-11”	3’-11”	4’-5”	55	Stress	2’-4”	2’-4”	2’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-1”
25	Stress	3’-6”	3’-6”	3’-11”	60	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-3”	3’-11”
30	Stress	3’-2”	3’-2”	3’-7”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	3’-0”	3’-0”	3’-4”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	2’-9”	2’-9”	3’-1”	75	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-11”	4’-0”	3’-8”
45	Stress	2’-7”	2’-7”	2’-11”	80	Stress	1’-12”	1’-12”	2’-2”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	2’-6”	2’-6”	2’-9”	85	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

Y-29-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.043 in^4/ft
Sx: 0.064 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-5”	3’-5”	3’-10”	55	Stress	2’-1”	2’-1”	2’-4”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	2’-10”	3’-10”	3’-6”
25	Stress	3’-1”	3’-1”	3’-5”	60	Stress	1’-12”	1’-12”	2’-2”
	Deflection	3’-8”	5’-0”	4’-7”		Deflection	2’-9”	3’-9”	3’-5”
30	Stress	2’-9”	2’-9”	3’-1”	65	Stress	1’-11”	1’-11”	2’-1”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-8”	3’-8”	3’-4”
35	Stress	2’-7”	2’-7”	2’-10”	70	Stress	1’-10”	1’-10”	2’-0”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-7”	3’-6”	3’-3”
40	Stress	2’-5”	2’-5”	2’-8”	75	Stress	1’-9”	1’-9”	2’-0”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-5”	3’-2”
45	Stress	2’-3”	2’-3”	2’-6”	80	Stress	1’-8”	1’-8”	1’-11”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”
50	Stress	2’-2”	2’-2”	2’-5”	85	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-11”	3’-11”	3’-8”		Deflection	2’-5”	3’-4”	3’-1”

*See page 2 for standard notes.

Load / Span Data

Y-29-E/W/S
Aluminum Perforated — 0.050 in

Ix: 0.181 in^4/ft
Sx: 0.211 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-9”	7’-9”	8’-8”	55	Stress	4’-8”	4’-8”	5’-3”
	Deflection	6’-5”	8’-9”	8’-0”		Deflection	4’-7”	6’-3”	5’-9”
25	Stress	6’-11”	6’-11”	7’-9”	60	Stress	4’-6”	4’-6”	5’-0”
	Deflection	6’-0”	8’-1”	7’-5”		Deflection	4’-6”	6’-0”	5’-7”
30	Stress	6’-4”	6’-4”	7’-1”	65	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-8”	7’-7”	7’-0”		Deflection	4’-4”	5’-11”	5’-5”
35	Stress	5’-10”	5’-10”	6’-7”	70	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	4’-3”	5’-9”	5’-3”
40	Stress	5’-6”	5’-6”	6’-2”	75	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	4’-2”	5’-7”	5’-2”
45	Stress	5’-2”	5’-2”	5’-9”	80	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	4’-1”	5’-6”	5’-0”
50	Stress	4’-11”	4’-11”	5’-6”	85	Stress	3’-9”	3’-9”	4’-3”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	4’-0”	5’-5”	4’-11”

Y-29-E/W/S
Aluminum Perforated — 0.050 in

Ix: 0.137 in^4/ft
Sx: 0.157 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-8”	6’-8”	7’-6”	55	Stress	4’-1”	4’-1”	4’-6”
	Deflection	5’-11”	7’-11”	7’-3”		Deflection	4’-2”	5’-8”	5’-2”
25	Stress	6’-0”	6’-0”	6’-8”	60	Stress	3’-10”	3’-10”	4’-4”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-1”	5’-6”	5’-1”
30	Stress	5’-6”	5’-6”	6’-1”	65	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-2”	6’-11”	6’-4”		Deflection	4’-0”	5’-4”	4’-11”
35	Stress	5’-1”	5’-1”	5’-8”	70	Stress	3’-7”	3’-7”	4’-0”
	Deflection	4’-11”	6’-7”	6’-1”		Deflection	3’-10”	5’-3”	4’-10”
40	Stress	4’-9”	4’-9”	5’-4”	75	Stress	3’-6”	3’-6”	3’-10”
	Deflection	4’-8”	6’-4”	5’-9”		Deflection	3’-9”	5’-1”	4’-8”
45	Stress	4’-6”	4’-6”	5’-0”	80	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-8”	5’-0”	4’-7”
50	Stress	4’-3”	4’-3”	4’-9”	85	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-8”	4’-11”	4’-6”

*See page 2 for standard notes.

Y-29-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.113 in^4/ft
Sx: 0.135 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-2”	6’-2”	6’-11”	55	Stress	3’-9”	3’-9”	4’-2”
	Deflection	5’-6”	7’-5”	6’-10”		Deflection	3’-11”	5’-4”	4’-11”
25	Stress	5’-7”	5’-7”	6’-2”	60	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-1”	6’-11”	6’-4”		Deflection	3’-10”	5’-2”	4’-9”
30	Stress	5’-1”	5’-1”	5’-8”	65	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-10”	6’-6”	6’-0”		Deflection	3’-9”	5’-0”	4’-7”
35	Stress	4’-8”	4’-8”	5’-3”	70	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-8”	4’-11”	4’-6”
40	Stress	4’-5”	4’-5”	4’-11”	75	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-7”	4’-9”	4’-5”
45	Stress	4’-2”	4’-2”	4’-7”	80	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-2”	5’-8”	5’-3”		Deflection	3’-6”	4’-8”	4’-4”
50	Stress	3’-11”	3’-11”	4’-5”	85	Stress	3’-0”	3’-0”	3’-4”
	Deflection	4’-1”	5’-6”	5’-0”		Deflection	3’-5”	4’-7”	4’-3”

Y-29-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.102 in^4/ft
Sx: 0.126 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-0”	6’-0”	6’-8”	55	Stress	3’-7”	3’-7”	4’-1”
	Deflection	5’-4”	7’-2”	6’-7”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	5’-4”	5’-4”	6’-0”	60	Stress	3’-6”	3’-6”	3’-10”
	Deflection	4’-11”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	4’-11”	4’-11”	5’-6”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-8”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-6”
35	Stress	4’-6”	4’-6”	5’-1”	70	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	4’-3”	4’-3”	4’-9”	75	Stress	3’-1”	3’-1”	3’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	4’-0”	4’-0”	4’-6”	80	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	3’-10”	3’-10”	4’-3”	85	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-4”	4’-5”	4’-1”

*See page 2 for standard notes.

Load / Span Data

Y-29-E/W/S
Aluminum Perforated — 0.050 in

Ix: 0.08 in^4/ft
Sx: 0.105 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-6”	5’-6”	6’-1”	55	Stress	3’-4”	3’-4”	3’-8”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-6”	4’-9”	4’-4”
25	Stress	4’-11”	4’-11”	5’-6”	60	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-7”	4’-3”
30	Stress	4’-6”	4’-6”	5’-0”	65	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-1”
35	Stress	4’-2”	4’-2”	4’-7”	70	Stress	2’-11”	2’-11”	3’-3”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-3”	4’-4”	4’-0”
40	Stress	3’-10”	3’-10”	4’-4”	75	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	3’-8”	3’-8”	4’-1”	80	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	3’-6”	3’-6”	3’-10”	85	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”

Y-29-E/W/S
Aluminum Perforated — 0.050 in

Ix: 0.053 in^4/ft
Sx: 0.079 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-4”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-3”	5’-9”	5’-4”		Deflection	3’-1”	4’-2”	3’-10”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-0”	5’-4”	4’-11”		Deflection	3’-0”	4’-0”	3’-8”
30	Stress	3’-10”	3’-10”	4’-4”	65	Stress	2’-8”	2’-8”	2’-11”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-11”	3’-11”	3’-7”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-10”	3’-10”	3’-6”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-9”	3’-5”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-8”	3’-4”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-8”	3’-7”	3’-3”

*See page 2 for standard notes.

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.103 in^4/ft
Sx: 0.132 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-11”	4’-11”	5’-6”	55	Stress	2’-11”	2’-11”	3’-4”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	3’-10”	5’-2”	4’-9”
25	Stress	4’-4”	4’-4”	4’-11”	60	Stress	2’-10”	2’-10”	3’-2”
	Deflection	5’-0”	6’-8”	6’-2”		Deflection	3’-8”	5’-0”	4’-7”
30	Stress	4’-0”	4’-0”	4’-6”	65	Stress	2’-9”	2’-9”	3’-0”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-7”	4’-10”	4’-6”
35	Stress	3’-8”	3’-8”	4’-2”	70	Stress	2’-7”	2’-7”	2’-11”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-6”	4’-9”	4’-4”
40	Stress	3’-5”	3’-5”	3’-10”	75	Stress	2’-6”	2’-6”	2’-10”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-8”	4’-3”
45	Stress	3’-3”	3’-3”	3’-8”	80	Stress	2’-5”	2’-5”	2’-9”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-7”	4’-2”
50	Stress	3’-1”	3’-1”	3’-5”	85	Stress	2’-4”	2’-4”	2’-8”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-4”	4’-5”	4’-1”

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.078 in^4/ft
Sx: 0.098 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-7”	2’-7”	2’-10”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-6”	4’-8”	4’-4”
25	Stress	3’-9”	3’-9”	4’-3”	60	Stress	2’-5”	2’-5”	2’-9”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-5”	4’-7”	4’-2”
30	Stress	3’-5”	3’-5”	3’-10”	65	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-3”	4’-5”	4’-1”
35	Stress	3’-2”	3’-2”	3’-7”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-1”	5’-5”	5’-0”		Deflection	3’-2”	4’-4”	4’-0”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-9”	5’-0”	4’-7”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-3”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	3’-0”	4’-1”	3’-9”

*See page 2 for standard notes.

Load / Span Data

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.064 in^4/ft
Sx: 0.084 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-11”	3’-11”	4’-4”	55	Stress	2’-4”	2’-4”	2’-8”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-3”	4’-5”	4’-0”
25	Stress	3’-6”	3’-6”	3’-11”	60	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-2”	4’-3”	3’-11”
30	Stress	3’-2”	3’-2”	3’-7”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	4’-0”	5’-5”	4’-11”		Deflection	3’-1”	4’-2”	3’-10”
35	Stress	2’-11”	2’-11”	3’-4”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-0”	4’-1”	3’-9”
40	Stress	2’-9”	2’-9”	3’-1”	75	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	2’-11”	4’-0”	3’-8”
45	Stress	2’-7”	2’-7”	2’-11”	80	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”
50	Stress	2’-6”	2’-6”	2’-9”	85	Stress	1’-11”	1’-11”	2’-1”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-10”	3’-10”	3’-6”

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.058 in^4/ft
Sx: 0.079 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-9”	3’-9”	4’-3”	55	Stress	2’-3”	2’-3”	2’-7”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-2”	4’-3”	3’-11”
25	Stress	3’-5”	3’-5”	3’-9”	60	Stress	2’-2”	2’-2”	2’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-1”	4’-2”	3’-10”
30	Stress	3’-1”	3’-1”	3’-5”	65	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-10”	5’-3”	4’-9”		Deflection	3’-0”	4’-0”	3’-8”
35	Stress	2’-10”	2’-10”	3’-2”	70	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-8”	4’-11”	4’-7”		Deflection	2’-11”	3’-11”	3’-7”
40	Stress	2’-8”	2’-8”	3’-0”	75	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-10”	3’-10”	3’-6”
45	Stress	2’-6”	2’-6”	2’-10”	80	Stress	1’-11”	1’-11”	2’-1”
	Deflection	3’-4”	4’-7”	4’-2”		Deflection	2’-9”	3’-9”	3’-5”
50	Stress	2’-5”	2’-5”	2’-8”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-3”	4’-5”	4’-0”		Deflection	2’-9”	3’-8”	3’-5”

*See page 2 for standard notes.

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.046 in^4/ft
Sx: 0.065 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-5”	3’-5”	3’-10”	55	Stress	2’-1”	2’-1”	2’-4”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	2’-11”	3’-11”	3’-7”
25	Stress	3’-1”	3’-1”	3’-5”	60	Stress	1’-12”	1’-12”	2’-3”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	2’-10”	3’-10”	3’-6”
30	Stress	2’-10”	2’-10”	3’-2”	65	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-9”	3’-9”	3’-5”
35	Stress	2’-7”	2’-7”	2’-11”	70	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-5”	4’-7”	4’-2”		Deflection	2’-8”	3’-7”	3’-4”
40	Stress	2’-5”	2’-5”	2’-9”	75	Stress	1’-9”	1’-9”	2’-0”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-7”	3’-6”	3’-3”
45	Stress	2’-4”	2’-4”	2’-7”	80	Stress	1’-9”	1’-9”	1’-11”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-7”	3’-6”	3’-2”
50	Stress	2’-2”	2’-2”	2’-5”	85	Stress	1’-8”	1’-8”	1’-10”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-5”	3’-1”

Y-36-E/W/S
Aluminum Perforated

0.032 in

Ix: 0.03 in^4/ft
Sx: 0.049 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-0”	3’-0”	3’-4”	55	Stress	1’-10”	1’-10”	2’-0”
	Deflection	3’-7”	4’-10”	4’-5”		Deflection	2’-6”	3’-5”	3’-2”
25	Stress	2’-8”	2’-8”	3’-0”	60	Stress	1’-9”	1’-9”	1’-11”
	Deflection	3’-4”	4’-5”	4’-1”		Deflection	2’-6”	3’-4”	3’-1”
30	Stress	2’-5”	2’-5”	2’-9”	65	Stress	1’-8”	1’-8”	1’-10”
	Deflection	3’-1”	4’-2”	3’-10”		Deflection	2’-5”	3’-3”	3’-0”
35	Stress	2’-3”	2’-3”	2’-6”	70	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-11”	4’-0”	3’-8”		Deflection	2’-4”	3’-2”	2’-11”
40	Stress	2’-1”	2’-1”	2’-4”	75	Stress	1’-7”	1’-7”	1’-9”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-3”	3’-1”	2’-10”
45	Stress	2’-0”	2’-0”	2’-3”	80	Stress	1’-6”	1’-6”	1’-8”
	Deflection	2’-9”	3’-8”	3’-4”		Deflection	2’-3”	3’-0”	2’-9”
50	Stress	1’-11”	1’-11”	2’-1”	85	Stress	1’-5”	1’-5”	1’-7”
	Deflection	2’-7”	3’-6”	3’-3”		Deflection	2’-2”	3’-0”	2’-9”

*See page 2 for standard notes.

Load / Span Data

Y-36-E/W/S
Aluminum Perforated — 0.040 in

Ix: 0.129 in^4/ft
Sx: 0.159 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	6’-0”	55	Stress	3’-3”	3’-3”	3’-7”
	Deflection	5’-9”	7’-9”	7’-2”		Deflection	4’-1”	5’-7”	5’-1”
25	Stress	4’-10”	4’-10”	5’-4”	60	Stress	3’-1”	3’-1”	3’-6”
	Deflection	5’-4”	7’-3”	6’-8”		Deflection	4’-0”	5’-5”	4’-11”
30	Stress	4’-5”	4’-5”	4’-11”	65	Stress	2’-12”	2’-12”	3’-4”
	Deflection	5’-0”	6’-9”	6’-3”		Deflection	3’-11”	5’-3”	4’-10”
35	Stress	4’-1”	4’-1”	4’-6”	70	Stress	2’-10”	2’-10”	3’-3”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-10”	5’-1”	4’-8”
40	Stress	3’-10”	3’-10”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-8”	5’-0”	4’-7”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-8”	4’-11”	4’-6”
50	Stress	3’-5”	3’-5”	3’-10”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-7”	4’-10”	4’-5”

Y-36-E/W/S
Aluminum Perforated — 0.040 in

Ix: 0.097 in^4/ft
Sx: 0.122 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-9”	4’-9”	5’-3”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	3’-9”	5’-1”	4’-8”
25	Stress	4’-3”	4’-3”	4’-9”	60	Stress	2’-9”	2’-9”	3’-0”
	Deflection	4’-10”	6’-7”	6’-0”		Deflection	3’-8”	4’-11”	4’-6”
30	Stress	3’-10”	3’-10”	4’-4”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-6”	4’-9”	4’-5”
35	Stress	3’-7”	3’-7”	4’-0”	70	Stress	2’-6”	2’-6”	2’-10”
	Deflection	4’-4”	5’-11”	5’-5”		Deflection	3’-5”	4’-8”	4’-3”
40	Stress	3’-4”	3’-4”	3’-9”	75	Stress	2’-5”	2’-5”	2’-9”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-5”	4’-7”	4’-2”
45	Stress	3’-2”	3’-2”	3’-6”	80	Stress	2’-4”	2’-4”	2’-8”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-6”	4’-1”
50	Stress	3’-0”	3’-0”	3’-4”	85	Stress	2’-3”	2’-3”	2’-7”
	Deflection	3’-10”	5’-3”	4’-10”		Deflection	3’-3”	4’-4”	4’-0”

*See page 2 for standard notes.

Y-36-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.08 in^4/ft
Sx: 0.105 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-4”	4’-4”	4’-10”	55	Stress	2’-8”	2’-8”	2’-11”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-6”	4’-9”	4’-4”
25	Stress	3’-11”	3’-11”	4’-4”	60	Stress	2’-6”	2’-6”	2’-10”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-5”	4’-7”	4’-3”
30	Stress	3’-7”	3’-7”	4’-0”	65	Stress	2’-5”	2’-5”	2’-8”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-4”	4’-6”	4’-1”
35	Stress	3’-4”	3’-4”	3’-8”	70	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-3”	4’-4”	4’-0”
40	Stress	3’-1”	3’-1”	3’-5”	75	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-2”	4’-3”	3’-11”
45	Stress	2’-11”	2’-11”	3’-3”	80	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
50	Stress	2’-9”	2’-9”	3’-1”	85	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-7”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”

Y-36-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.073 in^4/ft
Sx: 0.098 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-3”	4’-3”	4’-9”	55	Stress	2’-6”	2’-6”	2’-10”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-5”	4’-7”	4’-3”
25	Stress	3’-9”	3’-9”	4’-3”	60	Stress	2’-5”	2’-5”	2’-9”
	Deflection	4’-5”	6’-0”	5’-6”		Deflection	3’-4”	4’-5”	4’-1”
30	Stress	3’-5”	3’-5”	3’-10”	65	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-3”	4’-4”	4’-0”
35	Stress	3’-2”	3’-2”	3’-7”	70	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-11”	5’-4”	4’-11”		Deflection	3’-2”	4’-3”	3’-11”
40	Stress	3’-0”	3’-0”	3’-4”	75	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-2”	3’-10”
45	Stress	2’-10”	2’-10”	3’-2”	80	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	3’-0”	4’-1”	3’-9”
50	Stress	2’-8”	2’-8”	3’-0”	85	Stress	2’-1”	2’-1”	2’-3”
	Deflection	3’-6”	4’-9”	4’-4”		Deflection	2’-11”	4’-0”	3’-8”

*See page 2 for standard notes.

Load / Span Data

Y-36-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.057 in^4/ft
Sx: 0.081 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-10”	3’-10”	4’-4”	55	Stress	2’-4”	2’-4”	2’-7”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-2”	4’-3”	3’-11”
25	Stress	3’-5”	3’-5”	3’-10”	60	Stress	2’-3”	2’-3”	2’-6”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-1”	4’-1”	3’-9”
30	Stress	3’-2”	3’-2”	3’-6”	65	Stress	2’-2”	2’-2”	2’-5”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	3’-0”	4’-0”	3’-8”
35	Stress	2’-11”	2’-11”	3’-3”	70	Stress	2’-1”	2’-1”	2’-4”
	Deflection	3’-8”	4’-11”	4’-6”		Deflection	2’-11”	3’-11”	3’-7”
40	Stress	2’-9”	2’-9”	3’-0”	75	Stress	1’-12”	1’-12”	2’-3”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-10”	3’-10”	3’-6”
45	Stress	2’-7”	2’-7”	2’-10”	80	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-9”	3’-9”	3’-5”
50	Stress	2’-5”	2’-5”	2’-9”	85	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-3”	4’-4”	4’-0”		Deflection	2’-9”	3’-8”	3’-4”

Y-36-E/W/S
Aluminum Perforated

0.040 in

Ix: 0.038 in^4/ft
Sx: 0.061 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	3’-4”	3’-4”	3’-9”	55	Stress	2’-0”	2’-0”	2’-3”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-9”	3’-8”	3’-5”
25	Stress	3’-0”	3’-0”	3’-4”	60	Stress	1’-11”	1’-11”	2’-2”
	Deflection	3’-7”	4’-9”	4’-5”		Deflection	2’-8”	3’-7”	3’-3”
30	Stress	2’-9”	2’-9”	3’-0”	65	Stress	1’-10”	1’-10”	2’-1”
	Deflection	3’-4”	4’-6”	4’-2”		Deflection	2’-7”	3’-6”	3’-2”
35	Stress	2’-6”	2’-6”	2’-10”	70	Stress	1’-9”	1’-9”	2’-0”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-6”	3’-5”	3’-1”
40	Stress	2’-4”	2’-4”	2’-8”	75	Stress	1’-9”	1’-9”	1’-11”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-6”	3’-4”	3’-1”
45	Stress	2’-3”	2’-3”	2’-6”	80	Stress	1’-8”	1’-8”	1’-10”
	Deflection	2’-11”	3’-11”	3’-7”		Deflection	2’-5”	3’-3”	3’-0”
50	Stress	2’-1”	2’-1”	2’-4”	85	Stress	1’-7”	1’-7”	1’-10”
	Deflection	2’-10”	3’-10”	3’-6”		Deflection	2’-4”	3’-2”	2’-11”

*See page 2 for standard notes.

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.161 in^4/ft
Sx: 0.197 in^3/ft
Perforation: 10%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	7’-6”	7’-6”	8’-5”	55	Stress	4’-6”	4’-6”	5’-1”
	Deflection	6’-2”	8’-4”	7’-8”		Deflection	4’-5”	6’-0”	5’-6”
25	Stress	6’-9”	6’-9”	7’-6”	60	Stress	4’-4”	4’-4”	4’-10”
	Deflection	5’-9”	7’-9”	7’-2”		Deflection	4’-4”	5’-10”	5’-4”
30	Stress	6’-2”	6’-2”	6’-10”	65	Stress	4’-2”	4’-2”	4’-8”
	Deflection	5’-5”	7’-4”	6’-9”		Deflection	4’-2”	5’-8”	5’-2”
35	Stress	5’-8”	5’-8”	6’-4”	70	Stress	4’-0”	4’-0”	4’-6”
	Deflection	5’-2”	6’-11”	6’-5”		Deflection	4’-1”	5’-6”	5’-1”
40	Stress	5’-4”	5’-4”	5’-11”	75	Stress	3’-11”	3’-11”	4’-4”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	4’-0”	5’-5”	4’-11”
45	Stress	5’-0”	5’-0”	5’-7”	80	Stress	3’-9”	3’-9”	4’-2”
	Deflection	4’-9”	6’-5”	5’-10”		Deflection	3’-11”	5’-3”	4’-10”
50	Stress	4’-9”	4’-9”	5’-4”	85	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-7”	6’-2”	5’-8”		Deflection	3’-10”	5’-2”	4’-9”

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.122 in^4/ft
Sx: 0.152 in^3/ft
Perforation: 23%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-7”	6’-7”	7’-4”	55	Stress	4’-0”	4’-0”	4’-5”
	Deflection	5’-8”	7’-8”	7’-0”		Deflection	4’-0”	5’-5”	5’-0”
25	Stress	5’-11”	5’-11”	6’-7”	60	Stress	3’-10”	3’-10”	4’-3”
	Deflection	5’-3”	7’-1”	6’-6”		Deflection	3’-11”	5’-3”	4’-10”
30	Stress	5’-4”	5’-4”	6’-0”	65	Stress	3’-8”	3’-8”	4’-1”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-10”	5’-2”	4’-9”
35	Stress	5’-0”	5’-0”	5’-7”	70	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-8”	6’-4”	5’-10”		Deflection	3’-9”	5’-0”	4’-7”
40	Stress	4’-8”	4’-8”	5’-2”	75	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-8”	4’-11”	4’-6”
45	Stress	4’-5”	4’-5”	4’-11”	80	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-4”	5’-10”	5’-4”		Deflection	3’-7”	4’-10”	4’-5”
50	Stress	4’-2”	4’-2”	4’-8”	85	Stress	3’-2”	3’-2”	3’-7”
	Deflection	4’-2”	5’-7”	5’-2”		Deflection	3’-6”	4’-8”	4’-4”

*See page 2 for standard notes.

Load / Span Data

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.1 in^4/ft
Sx: 0.129 in^3/ft
Perforation: 30%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	6’-1”	6’-1”	6’-9”	55	Stress	3’-8”	3’-8”	4’-1”
	Deflection	5’-3”	7’-2”	6’-7”		Deflection	3’-9”	5’-1”	4’-8”
25	Stress	5’-5”	5’-5”	6’-1”	60	Stress	3’-6”	3’-6”	3’-11”
	Deflection	4’-11”	6’-8”	6’-1”		Deflection	3’-8”	4’-11”	4’-7”
30	Stress	5’-0”	5’-0”	5’-7”	65	Stress	3’-4”	3’-4”	3’-9”
	Deflection	4’-7”	6’-3”	5’-9”		Deflection	3’-7”	4’-10”	4’-5”
35	Stress	4’-7”	4’-7”	5’-2”	70	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-6”	4’-8”	4’-4”
40	Stress	4’-4”	4’-4”	4’-10”	75	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-2”	5’-8”	5’-2”		Deflection	3’-5”	4’-7”	4’-3”
45	Stress	4’-1”	4’-1”	4’-6”	80	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-0”	5’-5”	5’-0”		Deflection	3’-4”	4’-6”	4’-2”
50	Stress	3’-10”	3’-10”	4’-4”	85	Stress	2’-11”	2’-11”	3’-4”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-5”	4’-1”

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.091 in^4/ft
Sx: 0.121 in^3/ft
Perforation: 33%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-11”	5’-11”	6’-7”	55	Stress	3’-7”	3’-7”	4’-0”
	Deflection	5’-2”	6’-11”	6’-4”		Deflection	3’-8”	4’-11”	4’-6”
25	Stress	5’-3”	5’-3”	5’-11”	60	Stress	3’-5”	3’-5”	3’-10”
	Deflection	4’-9”	6’-5”	5’-11”		Deflection	3’-7”	4’-10”	4’-5”
30	Stress	4’-10”	4’-10”	5’-4”	65	Stress	3’-3”	3’-3”	3’-8”
	Deflection	4’-6”	6’-1”	5’-7”		Deflection	3’-6”	4’-8”	4’-4”
35	Stress	4’-5”	4’-5”	5’-0”	70	Stress	3’-2”	3’-2”	3’-6”
	Deflection	4’-3”	5’-9”	5’-3”		Deflection	3’-5”	4’-7”	4’-2”
40	Stress	4’-2”	4’-2”	4’-8”	75	Stress	3’-0”	3’-0”	3’-5”
	Deflection	4’-1”	5’-6”	5’-1”		Deflection	3’-4”	4’-5”	4’-1”
45	Stress	3’-11”	3’-11”	4’-5”	80	Stress	2’-11”	2’-11”	3’-3”
	Deflection	3’-11”	5’-3”	4’-10”		Deflection	3’-3”	4’-4”	4’-0”
50	Stress	3’-9”	3’-9”	4’-2”	85	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-2”	4’-3”	3’-11”

*See page 2 for standard notes.

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.071 in^4/ft
Sx: 0.1 in^3/ft
Perforation: 40%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	5’-4”	5’-4”	6’-0”	55	Stress	3’-3”	3’-3”	3’-7”
	Deflection	4’-9”	6’-5”	5’-10”		Deflection	3’-4”	4’-7”	4’-2”
25	Stress	4’-9”	4’-9”	5’-4”	60	Stress	3’-1”	3’-1”	3’-5”
	Deflection	4’-5”	5’-11”	5’-5”		Deflection	3’-3”	4’-5”	4’-1”
30	Stress	4’-4”	4’-4”	4’-11”	65	Stress	2’-12”	2’-12”	3’-4”
	Deflection	4’-2”	5’-7”	5’-1”		Deflection	3’-2”	4’-4”	3’-11”
35	Stress	4’-1”	4’-1”	4’-6”	70	Stress	2’-10”	2’-10”	3’-2”
	Deflection	3’-11”	5’-4”	4’-10”		Deflection	3’-1”	4’-2”	3’-10”
40	Stress	3’-9”	3’-9”	4’-3”	75	Stress	2’-9”	2’-9”	3’-1”
	Deflection	3’-9”	5’-1”	4’-8”		Deflection	3’-1”	4’-1”	3’-9”
45	Stress	3’-7”	3’-7”	4’-0”	80	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	3’-0”	4’-0”	3’-8”
50	Stress	3’-5”	3’-5”	3’-9”	85	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-6”	4’-8”	4’-4”		Deflection	2’-11”	3’-11”	3’-7”

Y-36-E/W/S
Aluminum Perforated

0.050 in

Ix: 0.047 in^4/ft
Sx: 0.076 in^3/ft
Perforation: 51%

Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)	Load psf		Single Span (ft)	Double Span (ft)	Triple Span (ft)
20	Stress	4’-8”	4’-8”	5’-2”	55	Stress	2’-10”	2’-10”	3’-2”
	Deflection	4’-1”	5’-7”	5’-1”		Deflection	2’-11”	4’-0”	3’-8”
25	Stress	4’-2”	4’-2”	4’-8”	60	Stress	2’-8”	2’-8”	3’-0”
	Deflection	3’-10”	5’-2”	4’-9”		Deflection	2’-10”	3’-10”	3’-7”
30	Stress	3’-10”	3’-10”	4’-3”	65	Stress	2’-7”	2’-7”	2’-11”
	Deflection	3’-7”	4’-10”	4’-6”		Deflection	2’-9”	3’-9”	3’-5”
35	Stress	3’-6”	3’-6”	3’-11”	70	Stress	2’-6”	2’-6”	2’-9”
	Deflection	3’-5”	4’-7”	4’-3”		Deflection	2’-9”	3’-8”	3’-4”
40	Stress	3’-4”	3’-4”	3’-8”	75	Stress	2’-5”	2’-5”	2’-8”
	Deflection	3’-3”	4’-5”	4’-1”		Deflection	2’-8”	3’-7”	3’-3”
45	Stress	3’-1”	3’-1”	3’-6”	80	Stress	2’-4”	2’-4”	2’-7”
	Deflection	3’-2”	4’-3”	3’-11”		Deflection	2’-7”	3’-6”	3’-3”
50	Stress	2’-11”	2’-11”	3’-4”	85	Stress	2’-3”	2’-3”	2’-6”
	Deflection	3’-0”	4’-1”	3’-9”		Deflection	2’-7”	3’-5”	3’-2”

*See page 2 for standard notes.

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