

## Unbraced Headers Supporting Roof – Sizing Table

### Design Criteria

Span:	Simple
Load:	Dead load = 15 psf
Deflection limits:	L/480 under snow load and L/360 under total load
Lateral supports:	At points of bearing only
Soffit:	Roof truss soffit up to 24 inches
Building:	NBC 2015 Part 9

### Serviceability and Ultimate Limit States

#### 24F-1.9E Headers

Roof span (ft)	Snow load = 30 psf Header clear span (ft)				Snow load = 40 psf Header clear span (ft)			
	0 to 5	6	8	10	0 to 5	6	8	10
	32	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- 5-1/2" x 16"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 16" 5-1/2" x 11-7/8"
34	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 16" 5-1/2" x 11-7/8"	- -
36	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 11-7/8"	- -
38	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 11-7/8"	- -
40	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 16" 5-1/2" x 11-7/8"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 14"	- -

  

Roof span (ft)	Snow load = 50 psf Header clear span (ft)				Snow load = 75 psf Header clear span (ft)			
	0 to 5	6	8	10	0 to 5	6	8	10
	32	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 11-7/8"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 11-7/8" 5-1/2" x 9-1/2"	- -
34	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 14"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 11-7/8" 5-1/2" x 9-1/2"	- -	- -
36	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 14"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 11-7/8" 5-1/2" x 9-1/2"	- -	- -
38	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 14"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- -	- -
40	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	- 5-1/2" x 16"	- -	3-1/2" x 9-1/2" 5-1/2" x 9-1/2"	3-1/2" x 14" 5-1/2" x 9-1/2"	- -	- -

#### Notes:

- This table is applicable to lintels meeting the above design criteria and is based on dry service conditions, standard-term duration of load, and uniformly distributed loads.
- Minimum bearing length shall be 3 inches, except for shaded areas, which shall be 4-1/2 inches.
- Lintels may consist of multiple plies, provided that the individual plies are fastened securely. For 2-ply and 3-ply 1-3/4-inch lintels, use the lintel sizes for 3-1/2-inch and 5-1/2-inch widths, respectively.