**Technical Note** 

## **BOISE GLULAM® Header Conversion Table**

## Converting 4x Douglas-fir #2 to 3 ½" 24F-V4 Glulam

DF-L #2	3 ½ x 6	3 ½ x 7 ½	3 ½ x 9	3 ½ x 10 ½	3 ½ X 12	3 ½ x 13 ½	3 ½ x 15
	Maximum Span or Span Range for BOISE GLULAM Header						
4 x 6	All Spans	All Spans	All Spans	All Spans	All Spans	All Spans	All Spans
4 x 8	10'-5"	All Spans	All Spans	All Spans	All Spans	All Spans	All Spans
4 x 10	None	12'-11"	22'-0"	All Spans	All Spans	All Spans	All Spans
4 x 12	None	None	3'-10" – 15'-5"	24'-6"	All Spans	All Spans	All Spans
4 x 14	None	None	None	4'-6" – 17'-10"	26'-5"	All Spans	All Spans
4 x 16	None	None	None	6'-10" – 13'-6"	5'-1" – 20'-5"	29'-0"	All Spans

## How to use the table:

- 1. Find specified 4x Douglas-fir header in left-most column.
- 2. Go across row to find allowable 3 ½" BOISE GLULAM header that meets or exceeds actual span. Bold & italic values represent an allowable span range in which the corresponding 3 ½" BOISE GLULAM header may be substituted.

## Table Notes:

- Table should only be used as an estimating tool for product substitution. Each BOISE GLULAM header application should be designed using the actual loads. The project's design professional of record shall verify any product substitution.
- Minimum load assumed on headers = 50 lb/ft.
- Table values based upon maximum PLF total load from moment, shear and a L/300 deflection limit (live load/total load ratio not to exceed 0.8).
- For use with simple span and uniform load applications only.
- Douglas-fir design values taken from the 2005 National Design Specification (NDS), Design Values for Wood Construction.
- Table values assume that lateral support is provided at each support and continuously along the top edge of the member.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with BC Calc sizing software.