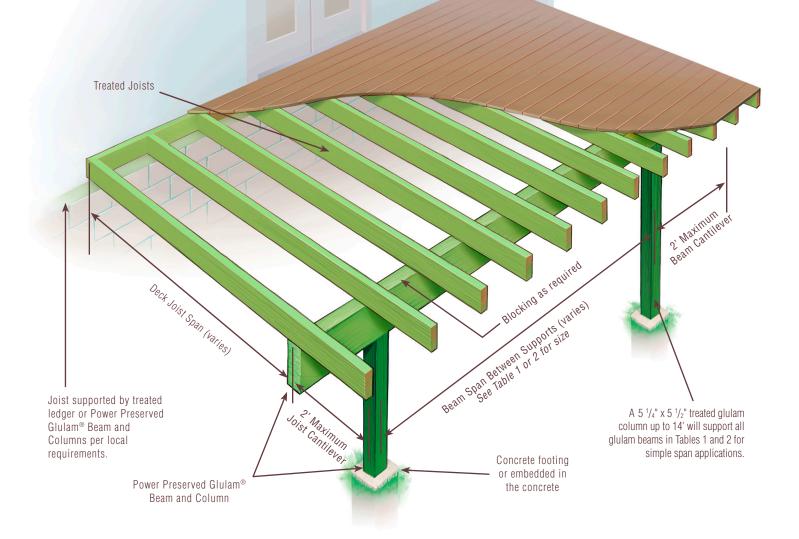
# POWER PRESERVED GLULAM® DECK GUIDE







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#### **General Notes**

- Ledger connection is critical. Consult deck designer for connection, or install a Power Preserved Glulam® Beam on Columns beside wall. Use same size beam as selected for front of deck. Consult American Wood Council (AWC) DCA6 Prescriptive Residential Deck Construction Guide.
- Install blocking as required by local building code or consult AWC's DCA6.
- For column sizes less than 5 1/4" x 5 1/2" in this deck guide, please consult supplier for proper column sizing.
- If using 2x6 or 2x8 PT SYP deck joist whereby creating a two span application, consult your deck designer or AFP since an additional Power Preserved Glulam® Beam and Columns will be required. If used, the center treated glulam beam must be sized since it is supporting the deck on both sides versus the outside beam, which is supporting only half of the deck joist span.









## Power Preserved Glulam® (PPG) Beam Size Selection Table EWS 24F-V5M1/SP Dry-Use $F_b$ =2,400 psi $F_v$ =300psi $F_c$ =740 psi E=1.8 x 10 $^6$ psi

### **Table 1 - Simple Span Beam (NO CANTILEVER)**

Lood (DCE)	Beam Span Between	Deck Joist Span					
Load (PSF)	Supports Simple Span	8,	10'	12'	14'	16'	
40 PSF Live Load 10 PSF Dead Load	10'	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	
	12'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	
	14'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	
	16'	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 14"	3 ¹/₂" x 14"	3 <sup>1</sup> / <sub>2</sub> " x 14"	
	18'	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	
	20'	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	
	22'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	
60 PSF Live Load 10 PSF Dead Load	10'	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	
	12'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	
	14'	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 14"	
	16'	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	
	18'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 <sup>1</sup> / <sub>4</sub> " x 16"	
	20'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 <sup>1</sup> / <sub>4</sub> " x 16"	5 ¹/₄" x 18"	
	22'	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 <sup>1</sup> / <sub>4</sub> " x 16"	5 <sup>1</sup> / <sub>4</sub> " x 18"	5 ¹/₄" x 18"	5 ¹/₄" x 18"	

#### **Table 2 - Beam with Maximum 2' CANTILEVER**

Load (PSF)	Beam Span Between Supports	Deck Joist Span						
	with Maximum 2' Cantilever	8'	10'	12'	14'	16'		
40 PSF Live Load 10 PSF Dead Load	10'	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> "		
	12'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "		
	14'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "		
	16'	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 14"	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 14"	3 ¹/₂" x 14"		
	18'	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"		
	20'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"		
	22'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 ¹/₄" x 16"		
60 PSF Live Load 10 PSF Dead Load	10'	2 <sup>7</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "		
	12'	2 <sup>7</sup> / <sub>16</sub> " x 11 <sup>1</sup> / <sub>4</sub> " 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> " 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "		
	14'	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 14" 3 <sup>1</sup> / <sub>2</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 14"	3 ¹/₂" x 14"	3 ¹/₂" x 14"		
	16'	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 14" 5 <sup>1</sup> / <sub>4</sub> " x 11 <sup>7</sup> / <sub>8</sub> "	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"		
	18'	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 16" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"		
	20'	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 14"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 ¹/₄" x 18"	5 ¹/₄" x 18"		
	22'	3 <sup>1</sup> / <sub>2</sub> " x 18" 5 <sup>1</sup> / <sub>4</sub> " x 16"	5 ¹/₄" x 18"	5 ¹/₄" x 18"	5 ¹/₄" x 18"	Reduce Beam Span		

#### **How to Use This Table**

- Select correct Table to use.
   Table 1 Beam (No Cantilever)
   Table 2 Beam with Maximum 2' Cantilever
- 2. Select Deck Design Load- 40 PSF or 60 PSF live load.
- 3. Determine Deck Joist Span. This does not include any cantilever.
- 4. Determine desired Beam Length- span from center to center of column.
- 5. Locate box that intersects desired column and row.
- 6. Select Power Preserved Glulam Beam® width and depth. If box shows two sizes, you can use either size.

- Total load deflection for the beam is limited to L/240. Live load deflection is limited to L/360. Cantilever deflection is limited to 2L/180.
- Minimum bearing length is 1 <sup>3</sup>/<sub>4</sub> at ends for simple span, except in shaded area requires 2 <sup>1</sup>/<sub>2</sub> bearing.
   For continuous span applications with or without maximum 2' cantilever (up to 52' length), increase intermediate supports to 5½' and use Table 1, assuming equal spans, example 16'-16'. For all other applications, contact your supplier.

  Bearing is required across full width of beam. Use metal post cap at beam to column connection.
- Ledger connections at the wall are critical; consult deck designer for connection, or install a beam supported on columns beside wall. Use the same size beam you select for the front of the deck.
  - For additional information consult the Prescriptive Residential Wood Deck Construction Guide based on the 2018 International Residential Code. American Wood Council (AWC) DCA6 Prescriptive Residential Deck Construction Guide. Visit our website to download a copy.
- For additional information on Power Preserved Glulam® visit our website at www.anthonyforest.com, or contact us at 1-800-221-2326. Power Preserved Glulam® is pressure treated with Hoover Cop-Guard® or Clear-Guard™ wood preservatives for above ground use.
- Power Preserved Glulam® products will resist fungal decay and wood-destroying insect attacks and is covered by a 25 year warranty by Hoover.
   3½" Power Preserved Glulam® can be substituted for 2½%" PPG of the same depth if 2½%" is not available in your market.