

# Wisdom Blake LLC

P.O. Box 81831 • Cleveland, OH 44181 • 440-777-5171

April 2, 2020

**Client:** Mr. John Smith

**RE:** **Structural Certification of Ridge Beam**  
24588 Dixie Dr.  
North Olmsted, OH 44070  
Job #: C040220



Per your request, I made a visit to the above property today to evaluate the removal of some walls on the ground level. The current walls are helping support the Roof load. Therefore, removing the walls will require a new structural ridge beam to span the full length of this room.

Using a design snow load of 30 psf, I calculate the required beam to be a triple 2x18" LVL (2.0E & 2800 Fb). The actual size would be 5¼"x18". You may install this beam by cutting out & replacing the existing ridge beam, or (more easily) install it under the existing ridge. Alternate beam would be a W10x26 A36 Steel Beam.

Beam length shall be field verified, but is about 24 ft. The columns under both ends shall be double nailed-up 2x6" Douglas Fir #2, with solid blocking in the existing walls. Heights shall be field verified. Tops of columns shall be fastened to the new ridge beam. Bottoms fastened to existing East sill plate, and West doorway header. The West doorway header (double 2x8" with ½" ply) was found acceptable to support the new column, even if the column center line is 2" or 3" from the end of the header. The ridge beam shall have structural screw fasteners all along its length to join the three sections together. Use 5" FlatLOK® (or equal) and drill using three staggered rows, with 24" spacing.

If I can be of any further service to you, do not hesitate to contact me. I, John Sender, hereby certify this report to be true and accurate to the best of my knowledge and ability.

A handwritten signature in cursive script that reads "John Sender".

John Sender, P.E.  
Wisdom Blake LLC  
Ohio Professional Engineering Certificate of Authorization No. 01086

