STRUCTURAL BUILDING COMPONENTS MAGAZINE
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SCDA Update

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Exam Time by Brigit Frank

The Structural Component Distributors Association began work on its first task toward enhancing industry technical education and facilitating an increase in technical professionalism. The SCDA executive committee and exam certification development members had a teleconferencein December to lay the groundwork for developing a certification exam using basic engineering principles. (See sample questions below.)

This exam will be mailed to the distributors of structural building components to complete. The exam may then be returned to SCDA for "grading." The objective of SCDA's exam is to allow companies:

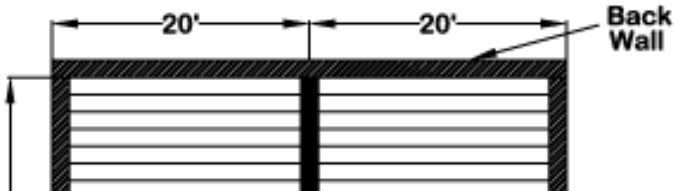
- To determine how their technical staff's knowledge ranks within the industry.
- To determine where their staff's technical strengths and weaknesses lie.
- To have their technical staff certified using an exam process.
- To provide managers with a tool to understand how to effectively train staff, give added value to their customers and company, and reduce the mistakes that come with inexperience.
- To provide management with an asset that can be used creatively in assessing job performance and career capabilities.

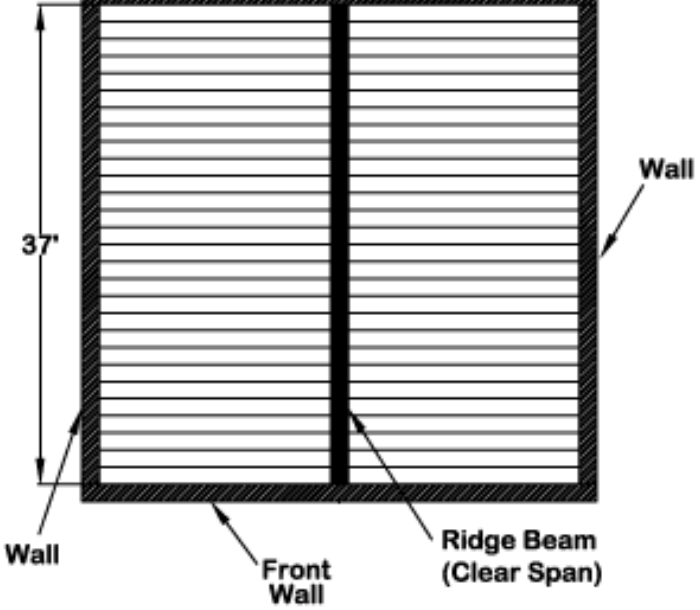
PROBLEM #1

Given: Total Design Load = 70 PSF
Framed 16" on center to the Ridge Beam

Find: 1) The Uniformly Distributed Load on the Ridge Beam.
2) The Point Load, in pounds, the Ridge Beam induces on the back wall.

Plan View





Solution:

1) The Uniformly Distributed Load on the Ridge Beam.

The Ridge Beam will cary one half of the 20' from the right side and half of 20' from the left.

(20'/2 + 20'/2) x 70 PSF = 1,400 PLF

2) The Point Load, in pounds, the Ridge Beam induces on the back wall.

The load is divided evenly between the back wall and the front wall.

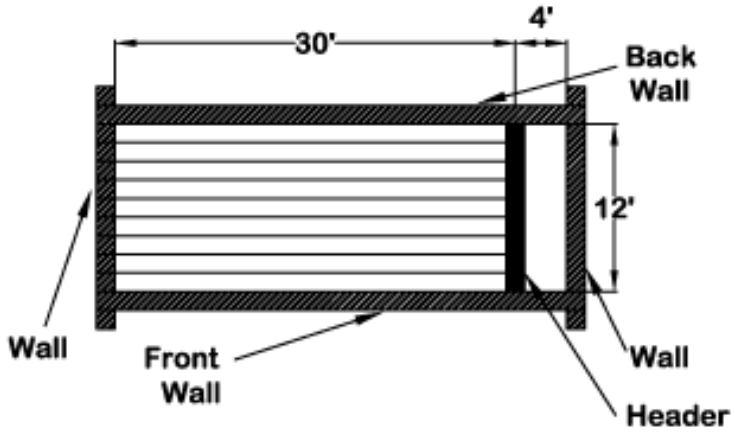
1400 PLF x (37'/2) = 25,900 pounds

PROBLEM #2

Given: Total Design Load = 85 PSF
Framed at 16" on center

Find: 1) The Uniformly Distributed Load on the Header.
2) The Point Load, in pounds, the Header induces on the front wall.

Plan View



Solution:

1) The Uniformly Distributed Load on the Header.

(30'/2) x 85 PSF = 1,275 PLF

2) The Point Load, in pounds, the Header induces on the front wall.

1275 PLF x (12'/2) = 7,650 pounds

If you would like to participate in the exam call SCDA Staff at 608/271-1176.

SBC HOME PAGE

The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA).