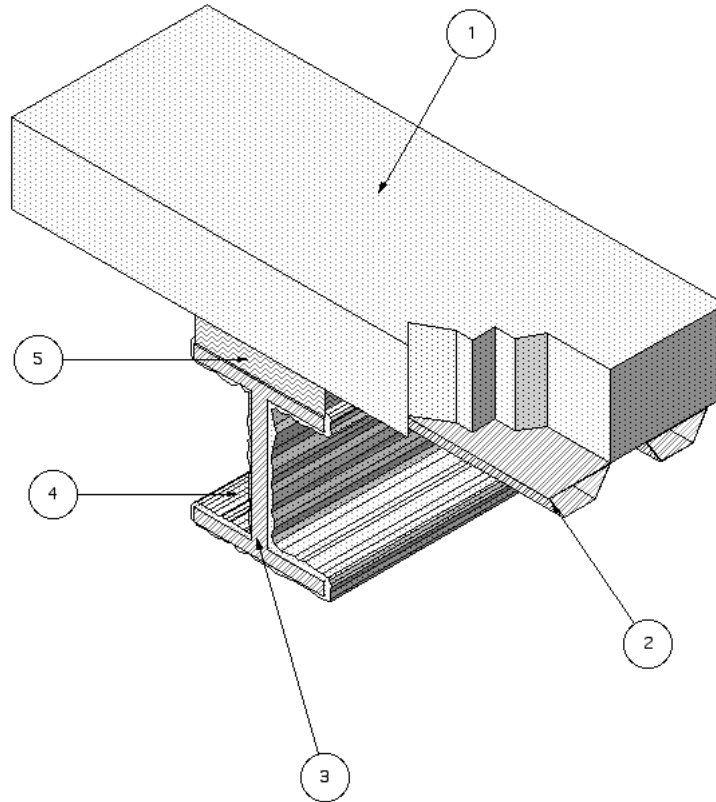


Design No. CC / BA 120-02 LOADED RESTRAINED BEAM
Carboline Company (Formerly Nu-Chem, Inc.) Fire-Sorb 1001 ASTM E119-98 Assembly Rating – 2 hr.



1. CONCRETE FLOOR ASSEMBLY: Normal or lightweight concrete (min. 105 pcf) floor with a min. 3 in. of coverage over steel decking.
2. FLUTED STEEL FLOOR UNITS: Corrugated steel decking, min. 1-1/2 in. deep, min. 20 GA.
3. STEEL STRUCTURAL BEAM: W6x25 steel beam, min. size, with an applied load, which stressed the beam to 22.0 ksi.
4. FIRE-RESISTIVE COATING: The steel beam is grit blasted and primed with a two component epoxy primer to a nom. Dry film thickness of 0.002 in. The Fire-Sorb 1001 is applied to all exposed

surfaces by spraying or painting in multiple coats to a final dry film thickness of at least 3 mm (0.118 in.).

Listed Manufacturer:

Carboline Company –
High-Performance Coatings
High-Performance Coating Systems
Fire-Sorb 1001

5. FLUTE FILLER: Completely fill the flutes between beam and the fluted steel floor units with 4 pcf mineral wool or 4 pcf ceramic fiber blanket.

Listed Manufacturer:

Division 07 - Thermal and Moisture Protection

07 81 00 Applied Fire Proofing

07 81 23 Intumescent Mastic Fireproofing

Only Intertek Certified Mineral Wool and Ceramic Fiber Blanket Manufacturer's products meeting the above minimum requirements.

6. RESTRAINED ASSEMBLY RATINGS:
The beam system is qualified for use in constructions with 2 hour Restrained Assembly Ratings with the limitation that

Previous OPL Design Listing B 306

Page 2 of 2

the beam topping (floor or roof assembly) must have equivalent or greater heat sink properties to that of a corrugated steel deck with lightweight concrete topping.