carboline®
Coatings - Linings - Fireproofing

CEMENTITIOUS FIREPROOFING PRODUCTS

High Rise Building Code Update

The International Code Council (ICC) has made a comprehensive set of changes to the International Building Code based on recommendations from the U.S. Department of Commerce's National Institute of Standards and Technology (NIST) in the wake of New York City's World Trade Center collapse. The goal of these changes is to provide safer buildings and high rise structures that have higher resistance to fire and collapse and are more easily evacuated in case of emergencies. The changes have been incorporated into the ICC's International Building Code (IBC), a model code used as the basis for building regulations enforced by U.S. state and local jurisdictions.

The new IBC code requirements as it relates to Sprayed Fire Resistive Materials (SFRMs) are increased bond strength for fireproofing used in steel structures over 75' in height. This is addressed in section 403 "High Rise Buildings". The requirements for SFRMs detailed in this section call for increasing bond strength characteristics as the height of the structure increases. When specifying a SFRM for a high rise building, the following bond strength criteria must be met:

SFRM Bond Strength Requirements for Commercial Buildings:

- Buildings with height up to 75' require minumum bond strength of 150 psf throughout the building.
- Buildings with heights from 75' to 420' require a minumum bond strength of 430 psf throughout the building.
- Buildings with heights 420' or greater require a minumum bond strength of 1,000 psf throughout the building.

When selecting the proper SFRM, ensure that the correct density and type of material is used to meet the bond strength requirements stated in the current International Building Code.
We recommend the following Carboline Southwest Fireproofing products based on the current International Building Code (IBC) bond strength requirements:

Product Selector			Meets Minimum Bond Strength Requirement for High Rise Buildings:		
Product	**Density (Class)**	**Bond Strength**	**Up to 75 ft. (150 psf)**	**75 to 420 ft. (430 psf)**	**>420 ft. (1,000 psf)**
Southwest Type 5GP™	15 lb/ft^3 (Commercial)	>200 psf @ 15 pcf	Yes	No	No
Southwest Type 5MD™	15-22 lb/ft^3 (Medium)	>430 psf @ 15 pcf***** >1,000 psf @ 16.5 pcf***** >3,000 psf @ 22 pcf*****	Yes	Yes	Yes

***** Bond Strength tests were conducted under ASTM E-736 standard procedure and/or in accordance with Appendix B of AWCI Technical Manual 12-A.

Note: Contact local Carboline sales representative for third party test reports if needed.