



**METAL
DESIGN
SYSTEMS**

DESIGNED FOR
A PERFECT FIT.

MDSI's take on NFPA 285

Building and energy codes are extremely complex, and understanding them can feel next to impossible. Metal Design Systems, Inc. (MDSI) wants to take all your concerns away.

According to IBC 2015, (generally speaking and barring exceptions) Metal Composite Material (MCM) is a combustible component of an exterior wall panel assembly. When it is used in Type I, II, III and IV construction, it can only be installed to a height of 40' before it must comply with the criteria of NFPA 285. If foamed plastic insulation is included in the wall assembly, the height exemption is eliminated and all walls (regardless of height) must comply. The National Fire Protection Association NFPA 285: Standard Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components is a full scale, 2-story, assembly specific test.

In 2017 the NFPA had voted to approve language revisions to the NFPA 285 test standard that would have mandated panel joint location parameters, making the test much more difficult to pass. The revisions have since been withdrawn from incorporation into the 2018 edition do to the severity of the impact it would have had on many fabricators and manufactures who would have been required to re-test. Additionally, the added difficulty may have hindered some assemblies and components from regaining compliant status without significant changes to the assembly.

Metal Design Systems, Inc. passed two complete assemblies with the mandated joint location standards. We have passed a standard that was determined to be too difficult to include in the test requirements. Our passed assemblies include one with polyisocyanurate insulation and one with mineral wool. We didn't just find ways to beat the test, (things that will never be incorporated into actual construction assemblies); we applied real world, constructible assemblies in our wall and window details. This allows us to provide you with real world solutions to project requirements.

When you are Specifying or Purchasing exterior cladding products make sure you look for compliance with the NFPA 285 2018 edition, and that the details are practical. Let us at Metal Design Systems, Inc. help you with your cladding system needs.

Do not hesitate to reach out in any way with your questions and concerns.

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