THERMASTEEL™
ADVANCED PANEL SYSTEMS

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Code Compliance of ThermaSteel Composite Structural Panels

As per IBC section 202, IBC section 703, NFPA 251, and NFPA 285 ThermaSteel composite structural insulated panels meet or exceed the standard adopted for non-combustible assemblies.

Whether a particular material is “combustible”, “non-combustible”, or ‘limited-combustible’ does not affect the combustibility of the assembly, which is what the IBC and NFPA considers.

> IBC Section 703.5.2: Composite Materials. Materials having a structural base of noncombustible material as determined in accordance with Section 703.5.1 with a surfacing not more than 0.125 inch (3.18 mm) thick that has a flame spread index not greater than 50 when tested in accordance with ASTM E84 or UL 723 shall be acceptable as noncombustible materials.

ThermaSteel composite insulated panels fall under the 703.5.2 standard by having a structural base of steel studs.

Per Section 202 IBC, defining whether an element of the building is appropriate for a non-combustible Type. The IBC, Section 202, defines non-combustible as having either passed ASTM E 136 tests or as “A material that, under the conditions anticipated, will not ignite or burn when subjected to fire or heat.” ThermaSteel structural composite assemblies meets that criteria.

There are many examples of the use of materials that considered individually as combustible are included in the composite structures or assemblies that are considered non-combustible.

Examples of combustible materials and their use in non-combustible assemblies:

Untreated wood
- Finishes
- Blocking
- Furring

Foil or paper-faced batt insulation
- Structural and partition wall assemblies

Drywall
- Paper facing is considered a combustible material, the presence of the gypsum core creates a composite panel that is non-combustible.

Aluminum
- Storefronts
- Glazing
- Fixtures
- Partitions
- Architectural elements
- Suspended ceiling systems

Un-modified EPS
- Exterior Insulated Finish Systems (EIFS)

ThermaSteel products meets the requirements for a non-combustible building Type and is often used as such. The presence of a combustible material in a non-combustible assembly or building is unavoidable and is the reason for how code recognizes and defines aspects of “combustibility”.