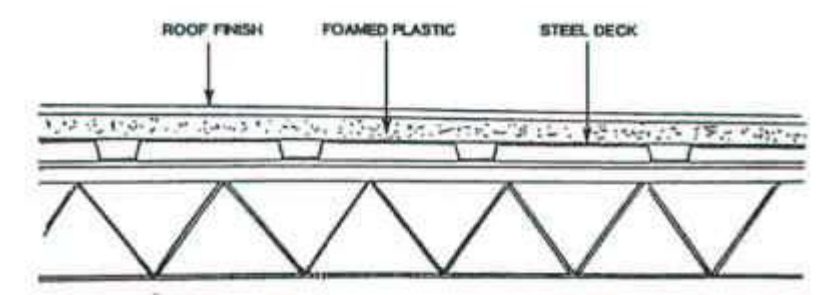


# Product Information Bulletin 254

## **PlastiSpan Insulation and Metal Roof Deck Assemblies**

## PlastiSpan Insulation and Metal Roof Deck Assemblies

The purpose of this bulletin is to review requirements for PlastiSpan insulation used in metal roof deck assemblies which form part of a building required to be of non-combustible construction as illustrated below.



Requirements for metal roof deck assemblies are addressed in Article 3.1.14.2. of the 2005 National Building Code of Canada and Provincial Building Codes as follows:

### 3.1.14.2. Metal Roof Deck Assemblies

- 1) Except as permitted by Sentence (2), a metal roof deck assembly shall meet the conditions of acceptance of CAN/ULC-S126-M, "Standard Method of Test for Fire Spread Under Roof-Deck Assemblies," if
  - a) it supports a combustible material above the deck that could propagate a fire beneath the roof deck assembly, and
  - b) the deck is used to comply with the requirements of Sentences 3.2.2.25.(2), 3.2.2.32.(2), 3.2.2.53.(2), 3.2.2.59.(2), 3.2.2.69.(2), and 3.2.2.76.(2) for noncombustible construction.
- 2) The requirements of Sentence (1) are waived provided
  - a) the combustible material above the roof deck is protected by not less than 12.7 mm thick gypsum board, mechanically fastened to a supporting assembly if located beneath the roof deck, or by a thermal barrier conforming to one of Clauses 3.1.5.11.(2)(c) to (e) that is located
    - i) on the underside of the combustible material, or
    - ii) beneath the roof deck,
  - b) the building is sprinklered throughout in accordance with Sentence 3.2.2.18.(3), or
  - c) the roof assembly has a fire-resistance rating not less than 45 min.

### To summarize:

#### Sentence (1) Discussion:

Sentence 3.1.14.2.(1) permits the application of foam plastic insulation above a metal roof deck provided the roof assembly has been tested and meets the conditions of acceptance of CAN/ULC-S126-M. PlastiSpan insulation is included as a component in several CAN/ULC-S126-M roof deck assemblies listed with Underwriters' Laboratories of Canada (ULC).

#### Sentence (2) Discussion:

Sentence 3.1.14.2.(2), states that the requirement of Sentence 3.1.14.2.(2) are waived if any of the conditions Clause 3.1.14.2.(2)(a), Clause 3.1.14.2.(2)(b) or Clause 3.1.14.2.(2)(c) is met.