



January 16<sup>th</sup>, 2018

**THERMAL BARRIER MATERIALS FOR PLASTIC INSULATION  
IN COMBUSTIBLE CONSTRUCTION  
National Building Code of Canada 2005/2010**

**ALL PLASTIC INSULATIONS HAVE TO BE PROTECTED BY AN APPROVED THERMAL BARRIER FROM THE ADJACENT SPACE WITHIN THE BUILDING.**

**COMBUSTIBLE BUILDING PART 9 art: 9.10.17.10**

The protection is not required in concealed spaces within attic, roof spaces, crawl spaces and wall assembly. Some additional requirements apply in these conditions see fire stop section 9.10.16.

**art: 3.1.4.2**

The protection is not required in concealed spaces within attic, roof spaces, crawl spaces and wall assembly. Some additional requirements apply in these conditions see fire stop section 3.1.11

If the building does not contain a group: B or C major occupancy sheet metal could be the thermal barrier

Group B: care or detention occupancy, police station, hospital ...

Group C: residential occupancies, clubs, hotels, apartments ...

- c) The sheet metal has to be mechanically fastened to the supporting assembly independent of the insulation.  
The thickness not less than 0.38 mm (0.0149 inch) gage 28  
The melting point not below 6500C.

**INTERIOR FINISHES ACTING AS A THERMAL BARRIER SUBSECTIONS 9.29.4 TO 9.29.9:**

**9.29.4. PLASTERING**

Conforming to CSA A82.30 - M

(fastened to the supporting assembly independent of the insulation.)

**9.29.5.1 GYPSUM BOARD FINISH (TAPED JOINTS)**

Regular gypsum Min. 12.7mm conforming to CAN/CSA - A82.27

Application conform to CAN / CSA -A82.31 - M

ASTM - C - 36, ASTM - C - 37, ASTM - C - 442, ASTM - C - 588, ASTM - C - 630, ASTM - C - 931, ASTM - C - 960.

**9.29.6. PLYWOOD FINISH (Minimum thickness)**

Maximum Spacing of support 400 mm (16") = 4,7 mm (3/16")

Maximum Spacing of support 600 mm (24") = 8,0 mm (5/16")  
Applied over continues back up: No minimum thickness required.

#### **9.29.7. HARDBOARD FINISH (Minimum thickness)**

Conforming to CAN/CGSB - 11.3 - M "HARDBOARD"  
Maximum Spacing of support 400 mm (16") = 6 mm (1/4")  
Maximum Spacing of support 600 mm (24") = 9 mm (3/8")  
Applied over continues back up: 3 mm (1/8")

#### **9.29.8. INSULATING FIBREBOARD FINISH (Minimum thickness)**

Conforming to CAN/CSA - A247 - M  
Sheet panel maximum spacing of support 400 mm (16") = 11 mm (7/16")  
Tile maximum spacing of support 400 mm (16") = 12,7 mm (1/2")

#### **9.29.9.9 PARTICLEBOARD FINISH (Minimum thickness)**

Conforming to ANSI - A208.1  
Maximum spacing of support 400 mm (16") = 6,35 mm (1/4")  
Maximum spacing of support 600 mm (24") = 9,5 mm (3/8")  
OSB Conforming to CSA - 0437.0 (Minimum thickness)  
Category O - 2  
Maximum spacing of support 400 mm (16") = 4,7 mm (3/16")  
Maximum spacing of support 600 mm (24") = 8 mm (5/16")  
Category O - 1 and R - 1  
Maximum spacing of support 400 mm (16") = 6,35 mm (1/4")  
Maximum spacing of support 600 mm (24") = 9,5 mm (3/8")