

## **Technical Product Information**



BOARD INSULATION 15080\* BOARD INSULATION 07 21 13\*\* METAL WALL PANELS 07 42 13\*\*

Type IVB, Complies

Non-Combustible

Flame Spread = 0 Smoke Developed = 0

In Compliance with

4.2 hr.ft2.F/Btu\*\*\*

0.74 m<sup>2</sup>K/W

Conforms

<1% @ 1200°F (650°C)

ASTM C612 @ 1200°F(650°C)

W605 U654

0.04%

Pass

#### **General Product Information:**

ROXUL® products are mineral wool fibre insulations made from basalt rock and slag. This combination results in a noncombustible product with a melting point of approximately 2150°F (1177°C), which gives it excellent fire resistance properties. ROXUL mineral wool is a water repellent yet vapour permeable material.

#### **Description & Common Applications:**

The Roxul FireWall™ 605 product is a non-combustible, rigid mineral wool insulation board that is lightweight, water repellent and designed for high temperature applications. Common application areas for the FireWall 605 board insulation are fire rated exterior non-load bearing sheet steel walls, where a one hour fire resistance rating is required.

#### **Compliance and Performance:**

ASTM C 612 Mineral Fiber Block and Board Thermal Insulation

ULC Design Number UL Design Number

Fire Performance:

CAN4 S114 Test for Non-Combustibility
CAN/ULC S102 Surface Burning Characteristics

**Maximum Service Temperature:** 

ASTM C 411 Hot Surface Performance

**Dimensional Stability:** 

ASTM C 356 Linear Shrinkage

**Moisture Resistance:** 

ASTM C 1104 Moisture Sorption

**Thermal Resistance:** 

ASTM C 518 (C 177) R-value/inch @ 75°F

RSI value/25.4 mm @ 24°C

**Corrosive Resistance:** 

ASTM C 665 Corrosiveness to Steel

ASTM C 795 \*\*\*\* Stainless Steel Stress Corrosion Specification as per Test

Methods C871 and C692: U.S. Nuclear Regulatory Commission, Reg. Guide #1.36: U.S. Military Specifications MIL-I-24244 (all

versions including B and C)

#### **Dimensions:**

24" (width) x 48" (length) 31.5" (width) x 48" (length) 32" (width) x 48" (length)

Thickness:

3" (76mm) Thickness





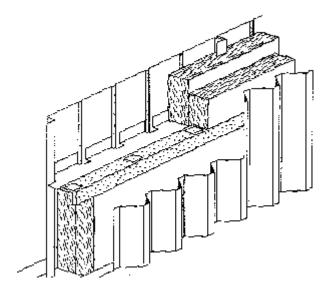
# **Key Application Qualifiers:**

- Easy to install
- Non-combustible
- Can be fabricated/laminated
- Excellent thermal resistance
- Low moisture sorption
- · Good compressive resistance
- Non-corrosive
- Chemically inert
- CFC and HCFC free product and process
- Made from natural & recycled materials

#### Other ROXUL Products:

Please consult ROXUL for all your insulation needs. We have an extensive range of products for all applications from pipe insulation to commercial products to residential batts. ROXUL invites all inquiries and will act promptly to service all of your requirements.





# FIRE-RATED EXTERIOR NON-LOADBEARING SHEET STEEL WALLS

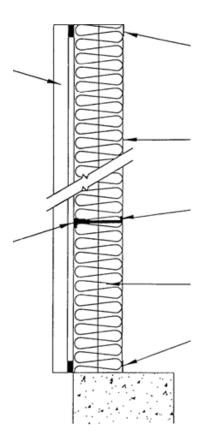
### FIRE RESISTANCE RATING = 1 HOUR

Equivalent Opening Factor at 2h (FEO) = 0.02

ULC Design No. W 605 UL Design No. U654

Exterior cladding: Corrugated prepainted sheet steel panels, to various profiles and widths. Panels minimum 0.46 mm thick, fastened to Z-bar sub-girts by 19 mm long sheet metal screws maximum 305 mm on centre. Lap joints of adjacent panels fastened by 19 mm long sheet metal screws maximum 406 mm on centre.

Ceramic fibre strip: 128 kg/m3 density, minimum 100 mm wide x 13 mm thick strips, attached to Z-bar sub-girt with stick pins spaced 250 mm on centre.



**Flashing channels**: 152 mm wide x 1.52 mm thick sheet steel with 45 mm and 76 mm flanges, maximum 406 mm on centre, fastened to concrete frame with 6.4 mm x 45 mm concrete anchors (top and bottom).

Steel liner: Panels fabricated from minimum 0.61 mm thick sheet steel, fastened to flashing channels by 19 mm long sheet metal screws spaced maximum 305 mm on centre. Side lap joints sealed with factoryapplied caulking and secured with 19 mm long sheet metal screws maximum 305 mm on centre.

**Z-bar sub-girt**: Minimum 152 mm wide x 1.22 mm thick sheet steel Z-bars with 25 mm and 38 mm flanges, maximum 1525 mm on centre, fastened to steel liner by 19 mm long sheet metal screws spaced maximum 250 mm on centre.

Mineral wool insulation: Roxul FireWall™605 (96 kg/m3 density) supplied in 76 mm thick sheets 610 mm x 1220 mm. Two layers installed with vertical and horizontal joints staggered.

Fire Side

Note:

As ROXUL Inc. has no control over installation design and workmanship, accessory materials or application conditions, ROXUL Inc. does not warranty the performance or results of any installation containing ROXUL Inc's. products. ROXUL Inc's. overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty is in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions are number of the conditions expressed or implied, including the warranties of merchantability and fitness for a particular number of the conditions are number of t

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<sup>\*\*\*\* &</sup>quot;Provisions for lot testing may be required, consult manufacturer."