Steel Frame Construction with Split Insulation up to 6 Stories: Lightweight Cladding.

Intended Use of this Document

This document provides example key assembly interface details showing the use of ROCKWOOL® products within a split-insulated wall assembly for mid-rise residential and commercial buildings up to 6 stories.

The example details could be modified for other building types or applications. The intended use has been limited to 6 stories for the sole purpose of creating boundaries around the detail development. The example details are designed to be generally applicable across North America; however, specific end use applications vary widely as to design, materials, and environments. Therefore, what is appropriate in any specific end use application is a determination that must be made independently by the experienced Project Architect and/or Engineer in their own professional judgment. ROCKWOOL® fully disclaims any liability for any of the content contained herein whether such liability be premised on a theory of contract, tort, or otherwise.

These example details are intended to provide architects, builders, and contractors with general guidance on the best practice approach to maintain:

- Air barrier continuity,
- Water resistant barrier (moisture barrier) continuity,
- Thermal continuity and minimizing thermal bridges,
- Cladding attachment and detailing, and
- Adequate drainage and ventilation of the wall cavity.

It is important to note these details show one method of constructing a split-insulated, exterior air barrier wall assembly; however, subtle changes at interface locations could be made to achieve the same intent. Review the building code requirements for your jurisdiction to ensure that all wall assembly detailing is in general conformance, or contact ROCKWOOL® Building Science Support for support on your project.
Assembly Description and Clear-Wall Effective R-Value Calculation

The thermal resistance of building assemblies is commonly indicated using R-value, provided in imperial units of \( [\text{ft}^2 \cdot ^\circ \text{F} \cdot \text{hr} / \text{Btu}] \), and can also be provided as RSI-value, in metric units of \([\text{m}^2 \cdot \text{K} / \text{W}]\). U-value is another way of describing heat flow through a wall, and is the inverse of R-value. The higher the R-value or the lower the U-value, the better the thermal performance.

Within this document, two-dimensional computer modeling was undertaken using Flixo to calculate two-dimensional heat transfer of the main wall assembly and calculate the effective R-value of the split-insulation steel-framed wall assembly. The results are summarized below.

<table>
<thead>
<tr>
<th>Material Layer</th>
<th>Thickness</th>
<th>Effective R-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm</td>
<td>inch</td>
</tr>
<tr>
<td>1 Exterior air film</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 Metal Panel Cladding</td>
<td>3.175</td>
<td>0.125</td>
</tr>
<tr>
<td>3 Air space</td>
<td>25.4</td>
<td>1</td>
</tr>
<tr>
<td>4 ROCKWOOL Cavityrock® insulation with intermittent thermally broken cladding support clip</td>
<td>203.2</td>
<td>8</td>
</tr>
<tr>
<td>5 Vapour permeable membrane</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6 Exterior gypsum board sheathing</td>
<td>12.7</td>
<td>0.5</td>
</tr>
<tr>
<td>7 Steel-framed wall with ROCKWOOL Comfortbatt® insulation</td>
<td>152.4</td>
<td>6</td>
</tr>
<tr>
<td>8 Vapour control layer</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>9 Gypsum board</td>
<td>12.7</td>
<td>0.5</td>
</tr>
<tr>
<td>10 Latex paint</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11 Interior air film</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Clear Wall Thermal Performance</td>
<td>7.1</td>
<td>40.2</td>
</tr>
</tbody>
</table>

Notes: * Assumes 20% degradation from thermally broken cladding support clip, spaced at 16” x 36” o.c ** 54% degradation from steel framing

Typical Building Details

To create effective and durable details for a steel-frame building, continuity of the air control layer, water control layer, thermal control layer, water-shedding surface, and sometimes the vapor control layer is needed throughout the building assemblies and at transitions and penetrations. This document presents eighteen typical building details that use ROCKWOOL® products; the locations of these common details on a theoretical building are shown in the figure below:

Psi- and Chi- Values

Heat travels through the path of least resistance, meaning that discontinuity in the thermal control layer and/or penetrations from conductive materials will result in greatly reduced effective R-values. Conductive materials like metal that penetrate the thermal barrier lead to heat loss and potential durability issues. These thermal bridges should be avoided and/or reduced to a minimum.

Thermal bridges are categorized in two forms, linear and point. A linear thermal bridge is represented by the Psi-value. Psi-value is the coefficient of the additional amount of heat flow along a line, seam, or joint between assemblies \([\text{W} / \text{m} \cdot \text{K}]\) or \([\text{BTU} / \text{hr} \cdot \text{ft} \cdot ^\circ \text{F}]\). A point thermal bridge is represented by the Chi-value, which is the additional amount of heat flow at a single point \([\text{W} / \text{K}]\) or \([\text{BTU} / \text{hr} \cdot ^\circ \text{F}]\).
**TYPICAL BASE OF WALL AT SLAB-ON-GRADE**

**MULTI-UNIT RESIDENTIAL/COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 6 STOREYS - LIGHTWEIGHT CLADDING**

- **Psi Value (Interior Dimensions)**: 
  - 0.960 W/m.K 
  - (-0.555 Btu/h.ft.F)

- **Psi Value (Exterior Dimensions)**: 
  - 1.192 W/m.K 
  - (-0.689 Btu/h.ft.F)

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**Notes:**

- For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets.
- For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.

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- **Concrete slab on grade**
- **Foundation dampproofing/waterproofing (WRB)**
- **Vapor control layer, all joints taped**
- **2 1/2" (64mm) ROCKWOOL® Comfortboard® 110 insulation**
- **6" steel stud bottom track and framed wall**
- **Fill cavity with ROCKWOOL® Comfortbatt®**
  - 6" [150mm] batt shown in 6" cavity
- **6" (150mm) ROCKWOOL® Comfortboard® 110 insulation, in one or two layers as required**
- **Composite metal pane cladding system over vertical sub-girts**
- **Thermally broken intermittent clip**
- **Vertical sub-girts fastened to intermittent clip creating air space**
- **Exterior gypsum board sheathing**
- **Vapor permeable membrane (AB/WRB)**
- **Self adhesive through-wall flashing membrane (AB/WRB)**
- **Tape (AB)**
- **Insect screen (perforated rigid metal sheet)**
- **Pre-finished metal flashing over protection board**
- **Protection board**
- **6" (150mm) ROCKWOOL® Comfortboard® 80/110 insulation**
- **Drainage mat c/w integral geotextile fabric (optional)**
- **Concrete slab on grade, sloped away from building**
Vapor control layer
Gypsum board c/w 2 layers latex paint
Acoustic caulking
Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity
Gypsum board c/w layers latex paint
Vapor control layer**
Cement board
Tape
6" steel stud bottom track and framed wall
Acoustic caulking
Concrete pavers on pedestals, filter fabric and XPS insulation
Drainage mat
Podium suspended slab
Metal flashing on XPS insulation
Thermal fastener system***
Podium waterproofing membrane
Insulation to extend 24" to 48" [600mm to 1200mm] beyond exterior wall
8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required
Exterior gypsum board sheathing
Vertical sub-girts fastened to intermittent clip creating air space
Vapor permeable membrane (AB/WRB)**
Thermally broken intermittent clip
Composite metal panel cladding system over vertical sub-girts

Psi Value (Interior Dimensions) 0.350 W/m.K (0.202 Btu/h.ft.F)
Psi Value (Exterior Dimensions) 0.346 W/m.K (0.200 Btu/h.ft.F)

The above thermal values provide a conservative estimate for use in early stage thermal analysis, whether using interior or exterior dimensions for area and length calculations. Note that subtle changes to the detail may result in significant changes to the thermal values. Designers are advised to refine the thermal analysis as the project design develops.

(Source: Flex 3D Thermal Modeling by RDH Building Science Inc.)
Designers are encouraged to contact ROCKWOOL for technical support with project specific thermal modeling.

For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets.

For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.

Contact ROCKWOOL™ technical support for fasterner guidelines.

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** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
*** Contact ROCKWOOL™ technical support for fasterner guidelines.
ROCKWOOL® insulation to extend down columns approximately 2'-8 7/16" (1.0m)

Suspended slab

Concrete shearwall or column

Thermal fastener system***

Parkade

6" (150mm) faced ROCKWOOL® insulation, all joints taped**

Concrete shearwall or column

TYPICAL PARKADE CEILING AT SHEER WALL OR COLUMN

Detail 03

MULTI-UNIT RESIDENTIAL/COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 6 STOREYS - LIGHTWEIGHT CLADDING

Psi Value (Interior Dimensions) 0.170 (0.098 Btu/h.ft.F)

Psi Value (Exterior Dimensions) 0.165 (0.095 Btu/h.ft.F)

For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.

*** Contact ROCKWOOL™ technical support for fasterner guidelines.

[Source: Flux 3D Thermal Modeling by RDH Building Science Inc.]
**Vapor control layer**

6" steel stud bottom track and framed wall

Acoustic caulking

Concrete floor slab

6" steel stud top track and framed wall,

Acoustic caulking

Vapor control layer**

Fill cavity with ROCKWOOL Comfortbatt®

6" [150mm] batt shown in 6" cavity

Gypsum board c/w 2 layers latex paint

**Psi Value (Interior Dimensions)**

0.015 W/m.K (0.009 Btu/h.ft.F)

**Psi Value (Exterior Dimensions)**

0.015 W/m.K (0.009 Btu/h.ft.F)

The above thermal values provide a conservative estimate for use in early stage thermal analysis, whether using interior or exterior dimensions for area and length calculations. Note that subtle changes to the detail may result in significant changes to the thermal values. Designers are advised to refine the thermal analysis as the project design develops.

(Source: Building Envelope Thermal Bridging Guide, Detail 5.2.39)

Designers are encouraged to contact ROCKWOOL for technical support with respect to specific thermal modeling.

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**Composite metal panel cladding system over vertical sub-girts**

8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required

Thermally broken intermittent clip

Vertical sub-girts fastened to intermittent clip creating air space

Vapor permeable membrane (AB/WRB)**

Self adhesive through-wall flashing membrane w/ sealant at top edge (WRB) (Optional)

Insect screen (perforated rigid metal sheet)

Metal cross-cavity flashing c/w end dams

Exterior gypsum board sheathing

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* For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
**Psi Value (Interior Dimensions)**

negligible

**Psi Value (Exterior Dimensions)**

negligible

The above thermal values provide a conservative estimate for use in early-stage thermal analysis, whether using interior or exterior dimensions for area and length calculations. Note that subtle changes to the detail may result in significant changes to the thermal values. Designers are advised to refine the thermal analysis as the project design develops.

(DataSource: Building Envelope Thermal Bridging Guide: Detail 5.2.39)

Designers are encouraged to contact ROCKWOOL for technical support with project-specific thermal modeling.

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**MULTI-UNIT RESIDENTIAL/COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 6 STOREYS - LIGHTWEIGHT CLADDING**

**Drawing Title:** TYPICAL BRICK VENEER TO LIGHTWEIGHT CLADDING TRANSITION

**Detail:** Detail 05

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*For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets.*

**For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.**
MULTI-UNIT RESIDENTIAL/COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 6 STOREYS - LIGHTWEIGHT CLADDING

TYPICAL TOP OF WALL AT CANTILEVERED FLOOR / SOFFIT

- 6" steel stud top track framed wall
- Acoustic caulking
- Vapor control layer
- Concrete slab
- Self-adhered membrane at corner transition
- 8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required
- Composite metal panel soffit
- Metal flashing c/w end dams
- Vertical sub-girts fastened to intermittent clip creating air space
- Thermally broken intermittent clip
- 8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required
- Exterior gypsum board sheathing
- Composite metal panel cladding system over vertical sub-girts
- Vapor permeable membrane (AB/WRB)**

Psi Value (Interior Dimensions)  
-0.080 W/m.K  
(-0.046 Btu/h.ft.F)

Psi Value (Exterior Dimensions)  
0.026 W/m.K  
(0.015 Btu/h.ft.F)

* For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
**Vapor control layer**
Gypsum board c/w 2 layers latex paint
6" steel stud bottom track and framed wall
Acoustic caulking

8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required
Vapor permeable membrane (AB/WRB)**

Vertical sub-girts fastened to intermittent clip creating air space
Exterior gypsum board sheathing
Composite metal panel cladding system over vertical sub-girts
Self adhesive through-wall flashing membrane w/ sealant at top edge (WRB)
Insect screen (perforated rigid metal sheet)
Preformed metal flashing c/w drip edge over sheathing lip and extend to edge of soffit cladding

8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required
Vapor permeable membrane (AB/WRB)**

Composite metal panel soffit

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**Psi Value**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Dimensions</td>
<td>0.083 W/m.K (0.048 Btu/h*ft.F)</td>
</tr>
<tr>
<td>Exterior Dimensions</td>
<td>-0.042 W/m.K (-0.024 Btu/h*ft.F)</td>
</tr>
</tbody>
</table>

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For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
**For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets.**

**For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.**
6" steel stud bottom track and framed wall

Acoustic caulking

Concrete slab

6" steel stud top track and framed wall

Backer rod and sealant joint

Acoustic caulking

Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity

Vapor control layer**

Gypsum board c/w 2 layers latex paint

Acoustic caulking

Backer rod and sealant joint from window frame to membrane

Fill void with insulation, by window manufacturer

Exterior gypsum board sheathing

8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required

Vertical sub-girts fastened to intermittent clip creating air space

Self adhesive through-wall flashing membrane w/ sealant at top edge (WRB) (Optional)

Insect screen (perforated rigid metal sheet)

Metal cross-cavity flashing c/w end dams

Vapor permeable membrane (AB/WRB)**

Tape (AB)

Self-adhered membrane prestrip

Intermittent clip to fasten receiver channel to wall clip

Metal panel closure c/w weep holes (optional head flashing)

Continuous closure receiver channel fastened to clip, concealed behind closure

Continuous backer rod and sealant

Triple glazed thermally broken window

Psi Value (Interior Dimensions) 0.141 W/m.K (0.082 Btu/h.ft.F)

Psi Value (Exterior Dimensions) 0.141 W/m.K (0.082 Btu/h.ft.F)

* For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
Intermittent clip and L-angle for sill flashing attachment

Continuous metal back dam angle

Blocking to suit gypsum board return or interior trim

Acoustic caulking

6" steel stud bottom track and framed wall

Intermittent shims for drainage at 12" o.c. (thickness as req'd ¼" min.)

Vapor control layer**

Fill cavity with ROCKWOOL Comfortbatt®

6" [150mm] batt shown in 6" cavity

Gypsum board c/w 2 layers latex paint

Triple glazed thermally broken window (aluminum illustrated)

Sealant

Pre-finished sill flashing c/w clips and end dams

Insect screen (perforated rigid metal sheet)

Intermittent clip

Self adhered membrane to extend into rough opening and up and over metal back dam angle

Vertical sub-girts fastened to intermittent clip creating air space

Vapor permeable membrane (AB/WRB)**

(Optional through wall membrane)

Composite metal panel cladding system over vertical sub-girts

8" (200mm) ROCKWOOL Cavityrock® insulation, in one or two layers as required

Exterior gypsum board sheathing

### Psi Value
**(Interior Dimensions) 0.148 W/m.K (0.086 Btu/h.ft.F)

** (Exterior Dimensions) 0.148 W/m.K (0.086 Btu/h.ft.F)

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** For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
6" steel stud framed wall
Gypsum board c/w 2 layers latex paint
Vapor control layer**
Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity
Blocking to suit gypsum board return or interior trim
Tape (AB)
Vapor permeable starter strip to extend into rough opening
Backer rod and sealant joint from window frame to membrane for air barrier continuity
Fill void with insulation, by window manufacturer
Triple glazed thermally broken window (aluminum illustrated)
Continuous backer rod and sealant
Continuous closure receiver channel fastened to clip, concealed behind closure
Intermittent clip to fasten receiver channel to wall clip
Tape (AB)
Pre-finished sill flashing below
Composite metal panel cladding system
Exterior gypsum board sheathing
Thermally broken intermittent clip c/w vertical sub-girts
Vapor permeable membrane jamb prestrip (AB/WRB)**
8" (200mm) ROCKWOOL Cavityrock® insulation
Vertical sub-girts fastened to intermittent clip creating air space
Metal panel jamb closure

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
Continuous sealant bead on sill angle membrane upturn for air barrier continuity

Sealant

Continuous metal angle

Blocking to suit gypsum board return or interior trim

Acoustic caulking

6" steel stud bottom track and framed wall

Thermal spacer

Vapor control layer**

Gypsum board c/w 2 layers latex paint

Fill cavity with ROCKWOOL Comfortbatt®
6" [150mm] batt shown in 6" cavity

Psi Value
(Interior Dimensions)
0.061 W/m.K
(0.035 Btu/h.ft.F)

Psi Value
(Exterior Dimensions)
0.061 W/m.K
(0.035 Btu/h.ft.F)

8" (200mm) ROCKWOOL Cavityrock® insulation in one or two layers as required

Exterior gypsum board sheathing

Vertical sub-girts fastened to intermittent clip creating air space

(Optional through wall membrane)

Composite metal panel cladding system over vertical sub-girts

Vapor permeable membrane (AB/WRB)**

Self adhered membrane to extend from curtain wall shoulder onto AB/WRB

Pre-finished sill flashing c/w clips and end dams

Insect screen (perforated rigid metal sheet)

Intermittent clip

Sealant

Triple glazed thermally broken curtainwall

Sealant

FOR TYPICAL CURTAIN WALL SILL

For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
**Backer rod and sealant joint from window frame to membrane for air barrier continuity**

- **Vapor permeable membrane jamb prestrip (AB/WRB)**
- **Exterior gypsum board sheathing**
- **Thermally broken intermittent clip c/w vertical sub-girts**
- **Vapor permeable membrane jamb prestrip (AB/WRB)**
- **8" (200mm) ROCKWOOL Cavityrock® insulation**

**6" steel stud framed wall**

- **Gypsum board c/w 2 layers latex paint**
- **Blocking to suit gypsum board return or interior trim**
- **Tape (AB)**
- **Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity**
- **Vapor permeable starter strip to extend into rough opening**

**Comprehensive insulation and sealing system**

- **Sealant at membrane leading edge**
- **Self-adhered membrane to extend from curtain wall shoulder to AB/WRB**
- **Pre-finished sill flashing below**
- **Metal panel jamb closure**

**Psi Value**

| Psi Value (Interior Dimensions) | 0.080 (W/m.K) (0.046 Btu/h.ft.F) |
| Psi Value (Exterior Dimensions) | 0.080 (W/m.K) (0.046 Btu/h.ft.F) |

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**For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.*
Composite metal panel cladding system over vertical sub-girts

Vertical sub-girts fastened to intermittent clip creating air space

Vapor permeable membrane (AB/WRB)**

Self adhesive through-wall flashing membrane w/ sealant at top edge (WRB) (Optional)

Wrap boot with foil-faced self-adhered membrane at top & sides

Rod and sealant at top & sides

Pre-finished metal vent hood c/w flange and removable screen

Sealant around all

Concrete floor slab

Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity

6" steel stud bottom track and framed wall

Acoustic caulking

Vapor control layer**

Gypsum board c/w 2 layers latex paint

Fill cavity with ROCKWOOL Comfortbatt® 6" [150mm] batt shown in 6" cavity

Galvanized metal inner boot extension

Gasket sealant all around collar

Exterior gypsum board sheathing

ROCKWOOL® Cavityrock® insulation, in one or two layers as required

For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
Roofing membrane installed as per manufacturers instructions (2-ply SBS illustrated)

Sealant complete with granules all around

Spun aluminum vent jack

Tightly pack with pourable sealant or grout (ramped)

Stainless steel hose clamp

Heat shrink collar

Silicone sealant all around for air barrier continuity

Fully adhered air and vapor control layer (AB)

Typical pipe penetration

TYPICAL PENETRATION THROUGH ROOF

Psi Value (Interior Dimensions) 0.342 W/k (0.198 Btu/h.F)

Psi Value (Exterior Dimensions) 0.342 W/k (0.198 Btu/h.F)

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[Source: Building Envelope Thermal Bridging Guide: Detail 10.4.1]

Designers are encouraged to contact ROCKWOOL for technical support with project-specific thermal modeling.

For thermal performance of ROCKWOOL® products, please refer to ROCKWOOL® technical data sheets

** For climate zone specific considerations for thermal, air and vapor control layer properties and requirements, please contact ROCKWOOL® Building Science for support.
Pre-finished parapet cap flashing c/w wind clips, both sides, for attachment

4" (100mm) ROCKWOOL Toprock® DD Plus insulation

Roofing membrane installed as per manufacturers instructions (2-ply SBS illustrated)

Fill void with ROCKWOOL Comfortbatt®

4" (100mm) ROCKWOOL Toprock® DD insulation

ROCKWOOL Toprock® DD Plus/ Multifix™ insulation, joints offset and staggered

6" (150mm) ROCKWOOL Toprock® DD insulation

6" (150mm) ROCKWOOL Toprock® DD tapered insulation

Concrete roof slab

Fully adhered air and vapor control layer (AB)

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Psi Value (Interior Dimensions) 0.014 W/m.K (0.008 Btu/h.ft.F)
Psi Value (Exterior Dimensions) 0.014 W/m.K (0.008 Btu/h.ft.F)

The above thermal values provide a conservative estimate for use in early stage thermal analysis, whether using interior or exterior dimensions for area and length takeoffs. Note that subtle changes to the detail may result in significant changes to the thermal values. Designers are advised to refine the thermal analysis as the project design develops.

(Source: Flixo 2D Thermal Modelling by RDH Building Science Inc.)

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MULTI-UNIT RESIDENTIAL/COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 6 STOREYS - LIGHTWEIGHT CLADDING

TYPICAL MID-ROOF CURB

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