

# Commercial Steel Frame Construction up to 4 Storeys: Lightweight Cladding.

## Intended Use of this Document

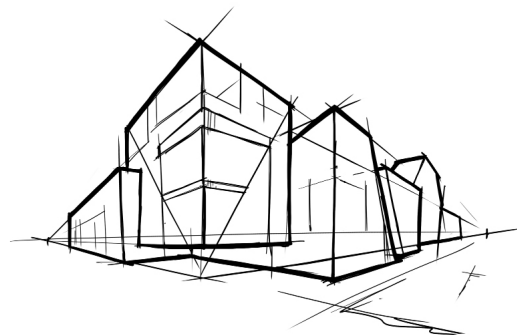
This document provides example key assembly interface details showing the use of ROCKWOOL™ products within a split-insulated wall assembly for commercial buildings up to 4 stories.

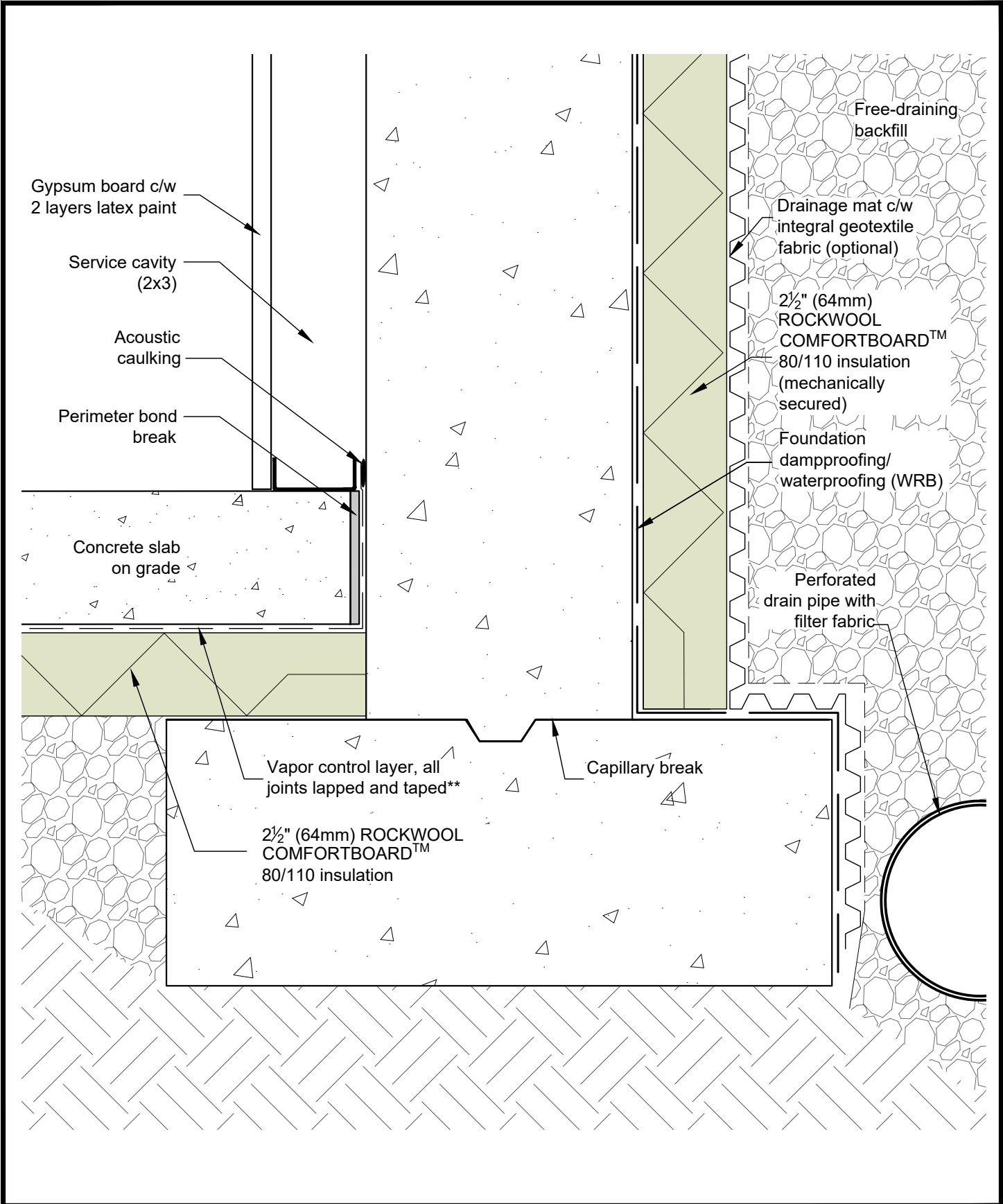
The example details could be modified for other building types or applications. The intended use has been limited to 4 stories for the sole purpose of creating boundaries around the detail development. The example details are designed to be generally applicable across North America; however, specific 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.





**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

**TYPICAL FOUNDATION WALL AT FOOTING**

DRAWING NO.:

**Detail 01**

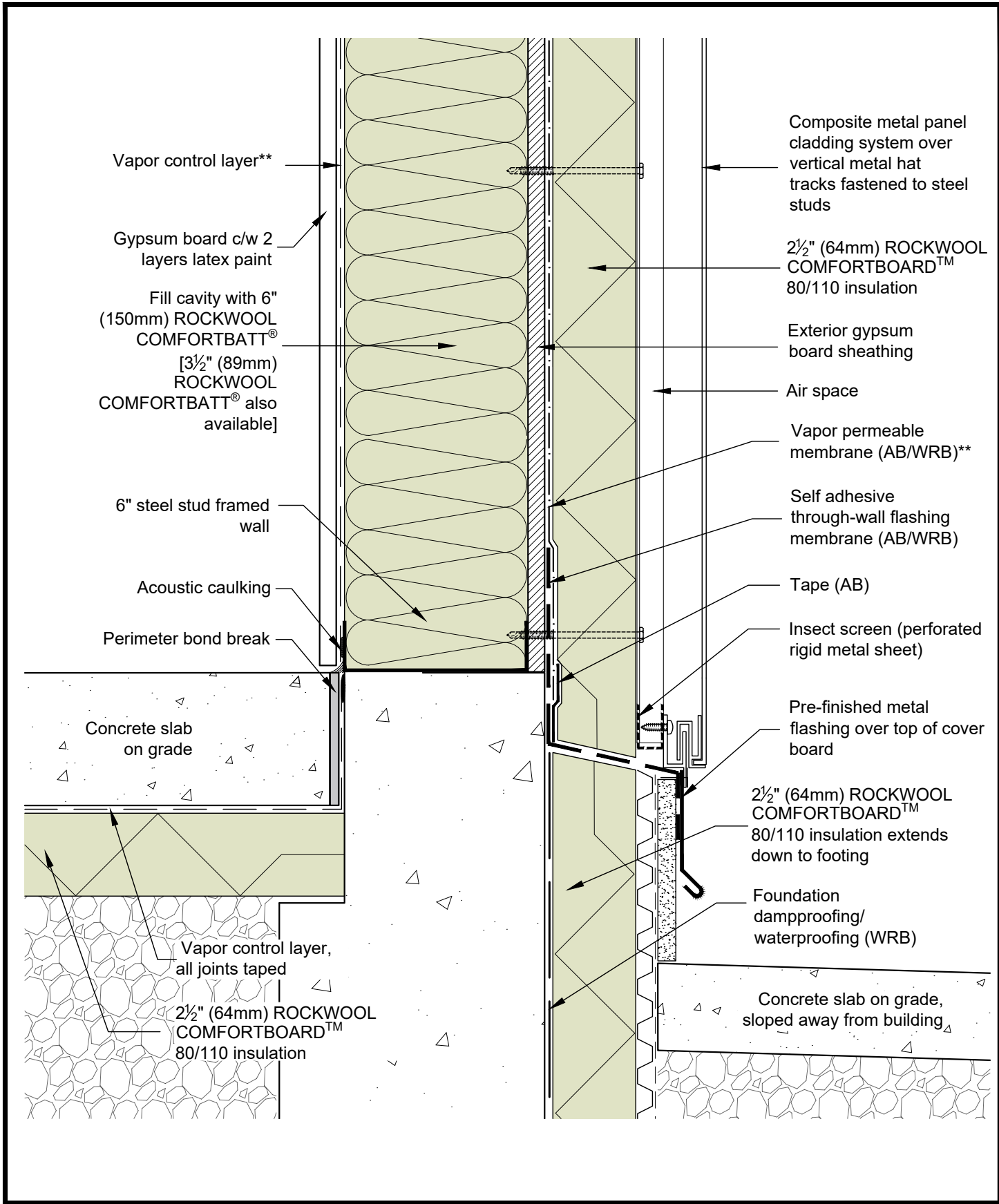
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:22 PM

\* 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

Fill cavity with 6" (150mm) ROCKWOOL COMFORTBATT® [3½" (89mm) ROCKWOOL COMFORTBATT® also available]

6" steel stud framed wall

Acoustic caulking

Perimeter bond break

Concrete slab on grade

Vapor control layer, all joints taped

2½" (64mm) ROCKWOOL COMFORTBOARD™ 80/110 insulation

Composite metal panel cladding system over vertical metal hat tracks fastened to steel studs

2½" (64mm) ROCKWOOL COMFORTBOARD™ 80/110 insulation

Exterior gypsum board sheathing

Air space

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 top of cover board

2½" (64mm) ROCKWOOL COMFORTBOARD™ 80/110 insulation extends down to footing

Foundation dampproofing/ waterproofing (WRB)

Concrete slab on grade, sloped away from building

**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL BASE OF WALL AT SLAB-ON-GRADE

DRAWING NO.:

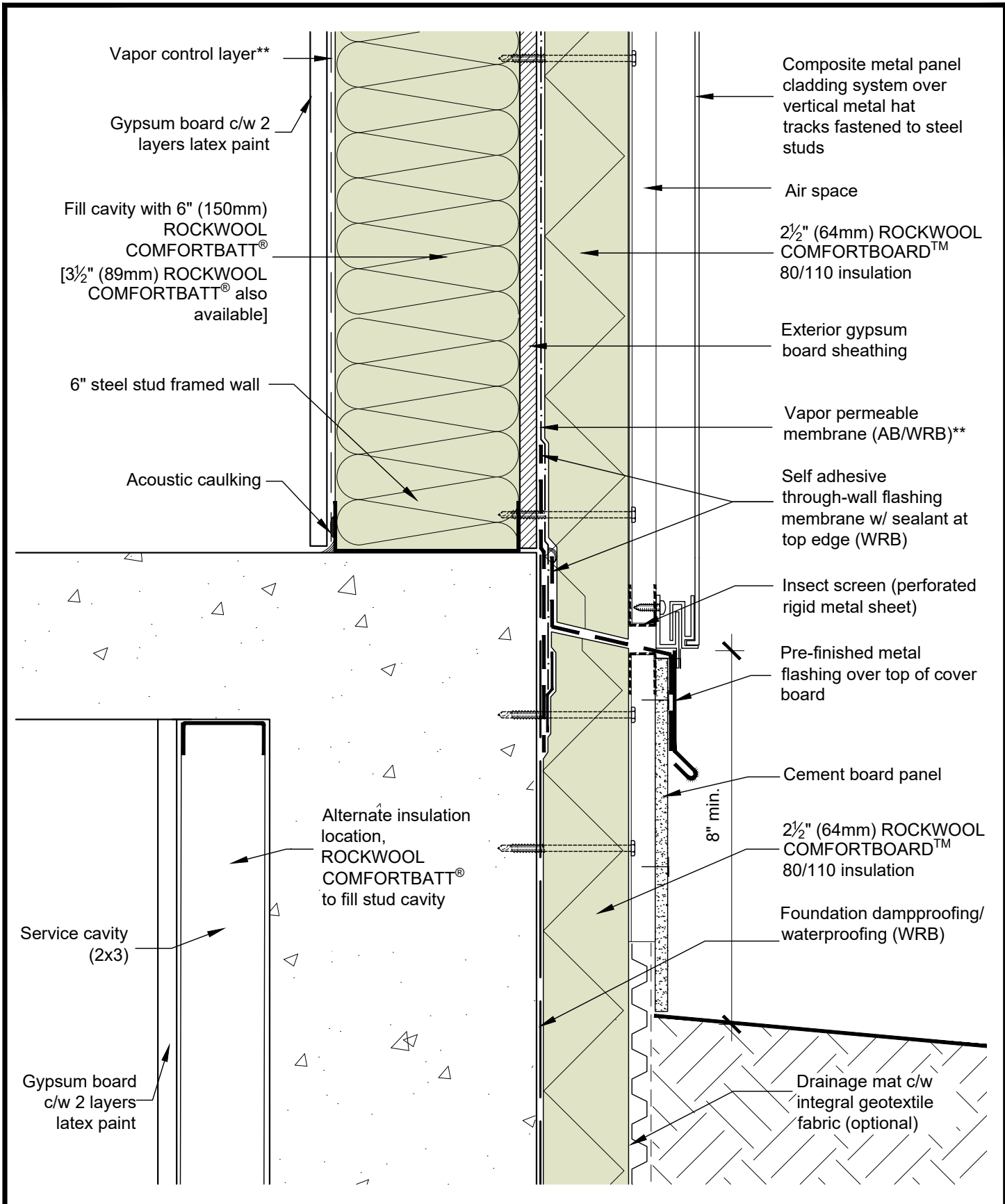
Detail 02

SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:22 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL BASE OF WALL AT FOUNDATION

DRAWING NO.:

Detail 03

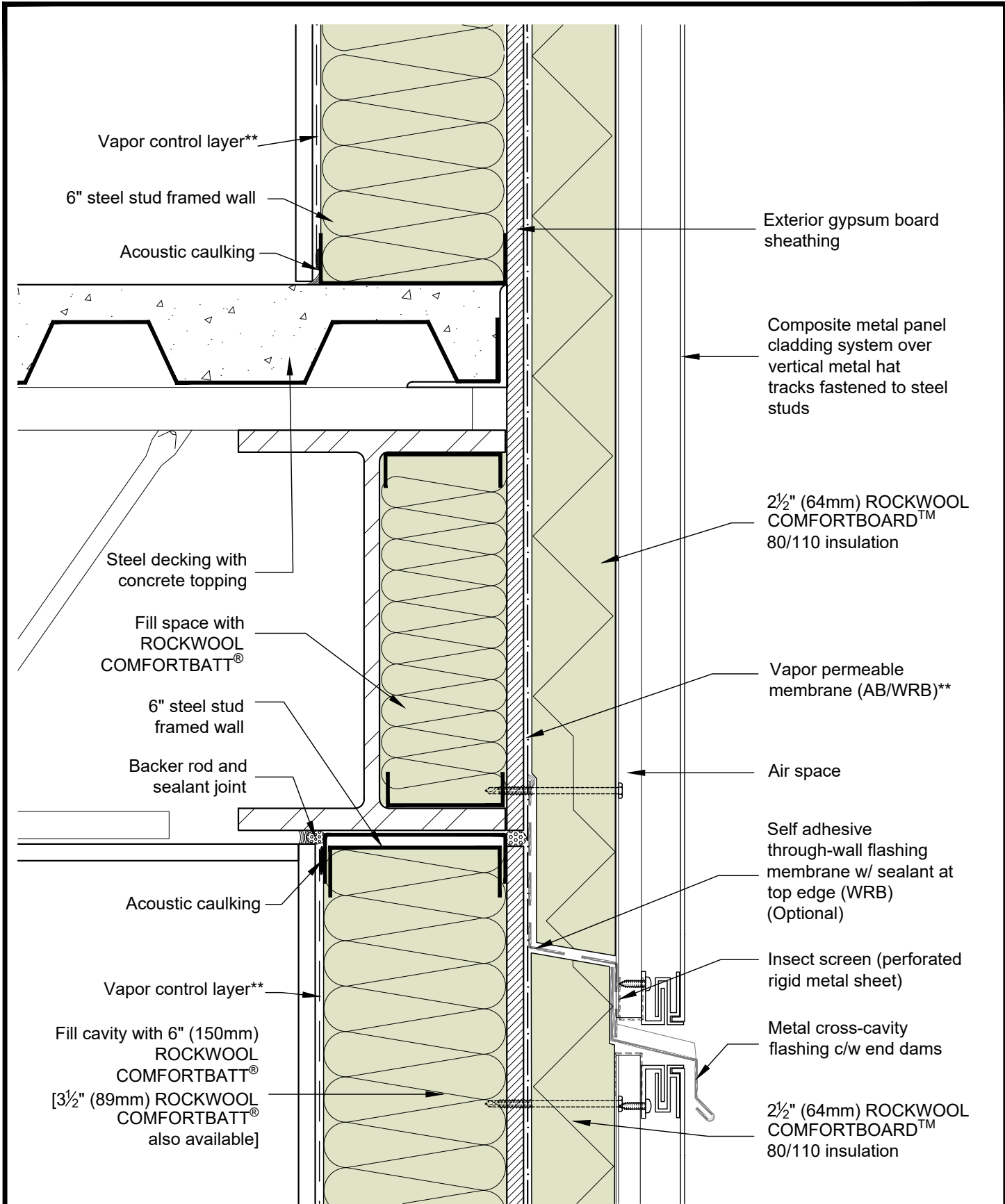
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:22 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL WALL AT FLOOR LEVEL

DRAWING NO.:

Detail 04

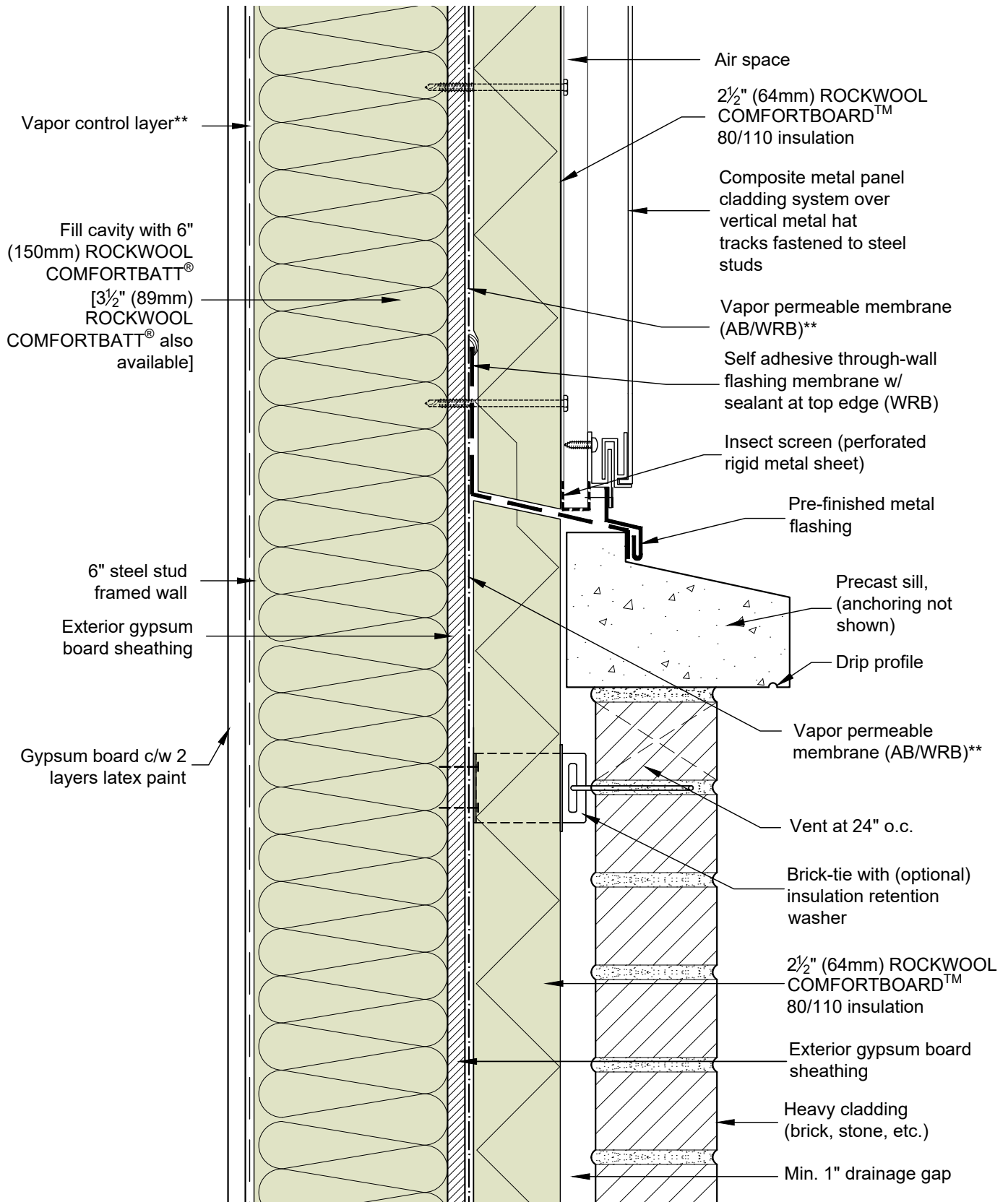
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:22 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL WALL BRICK TO CLADDING TRANSITION

DRAWING NO.:

Detail 05

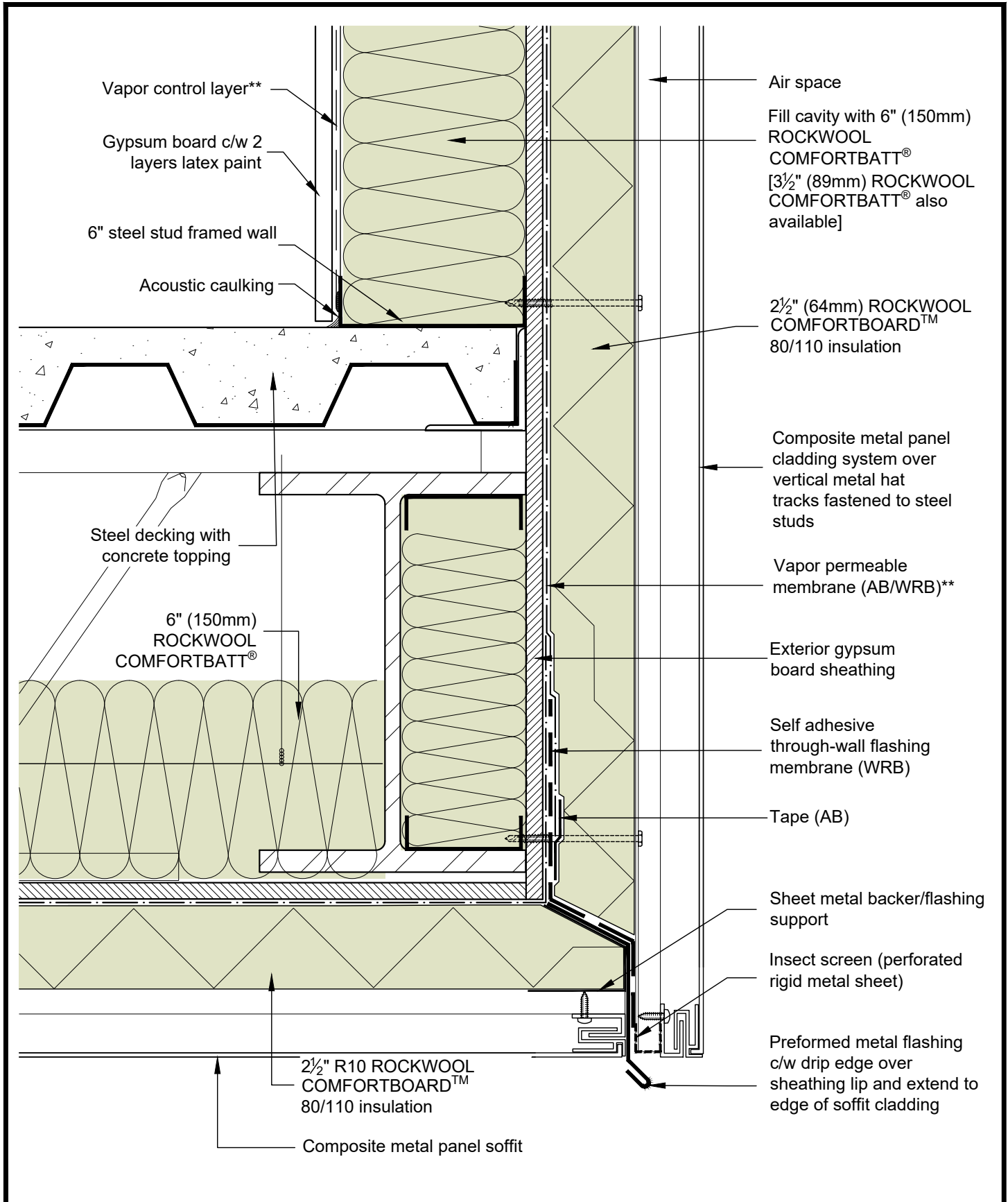
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:22 PM

\* 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 framed wall  
 Acoustic caulking

Air space  
 Fill cavity with 6" (150mm) ROCKWOOL COMFORTBATT® [3½" (89mm) ROCKWOOL COMFORTBATT® also available]

2½" (64mm) ROCKWOOL COMFORTBOARD™ 80/110 insulation

Composite metal panel cladding system over vertical metal hat tracks fastened to steel studs

Steel decking with concrete topping

Vapor permeable membrane (AB/WRB)\*\*

6" (150mm) ROCKWOOL COMFORTBATT®

Exterior gypsum board sheathing

Self adhesive through-wall flashing membrane (WRB)

Tape (AB)

Sheet metal backer/flashing support

Insect screen (perforated rigid metal sheet)

2½" R10 ROCKWOOL COMFORTBOARD™ 80/110 insulation

Preformed metal flashing c/w drip edge over sheathing lip and extend to edge of soffit cladding

Composite metal panel soffit

**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

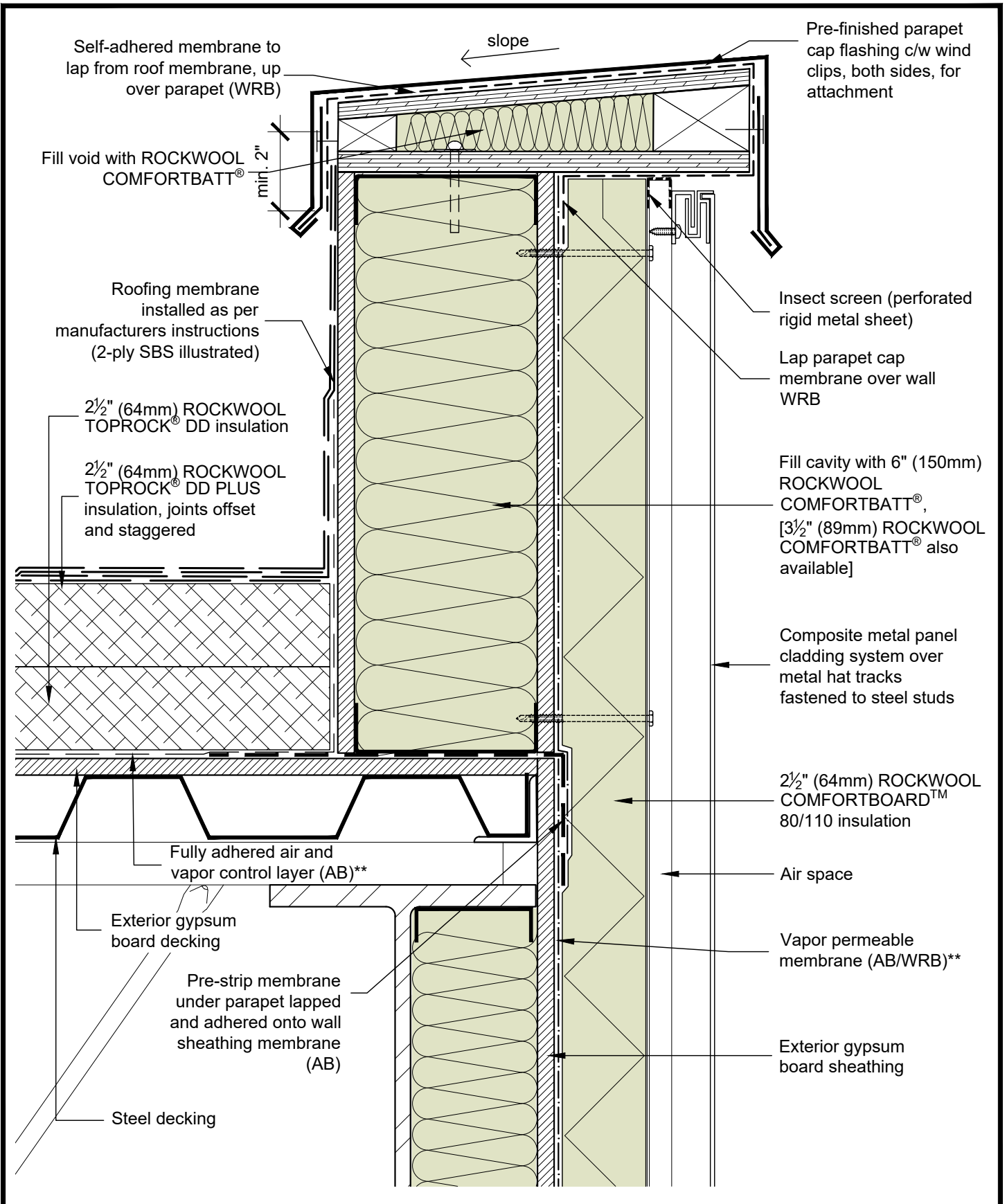
TYPICAL WALL AT CANTILEVERED FLOOR

DRAWING NO.:  
**Detail 06**

SCALE: 3" = 1'-0"  
 DATE: JUNE 2020

June 11 2020 4:23 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

**TYPICAL LOW SLOPE ROOF PARAPET SECTION**

DRAWING NO.:

**Detail 07**

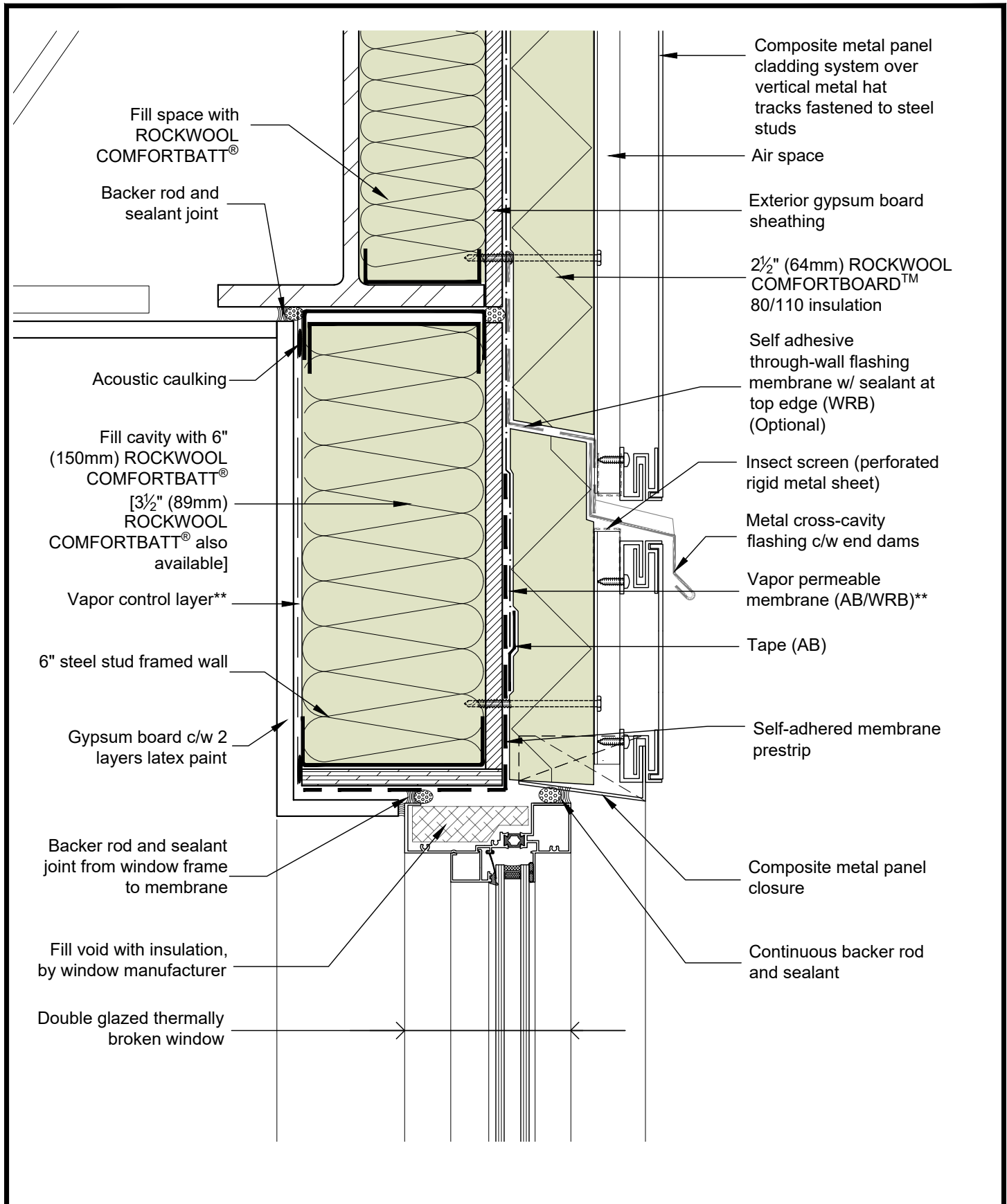
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:23 PM

\* 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.





**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL FLANGELESS WINDOW HEAD

DRAWING NO.:

Detail 08

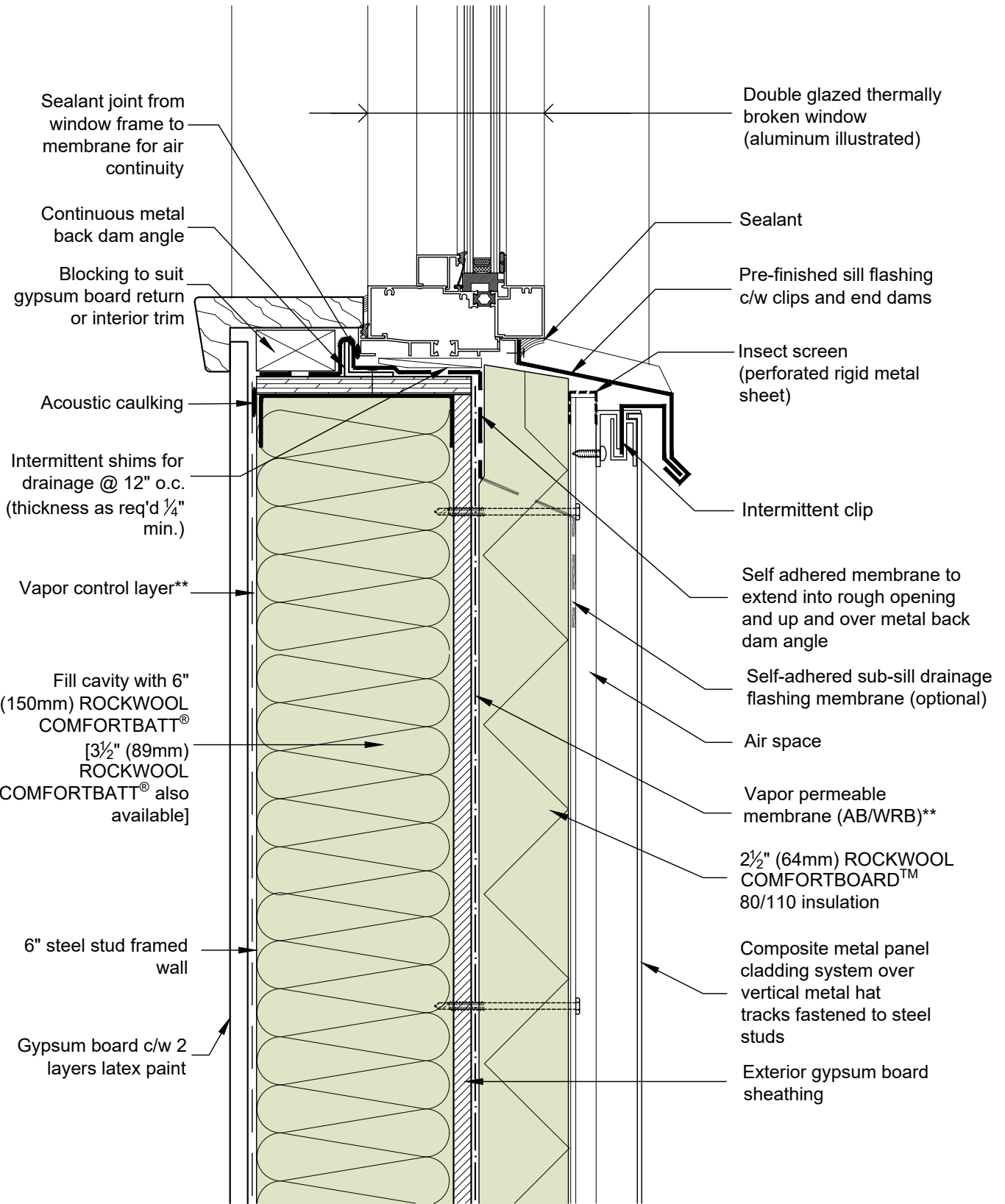
SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:23 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

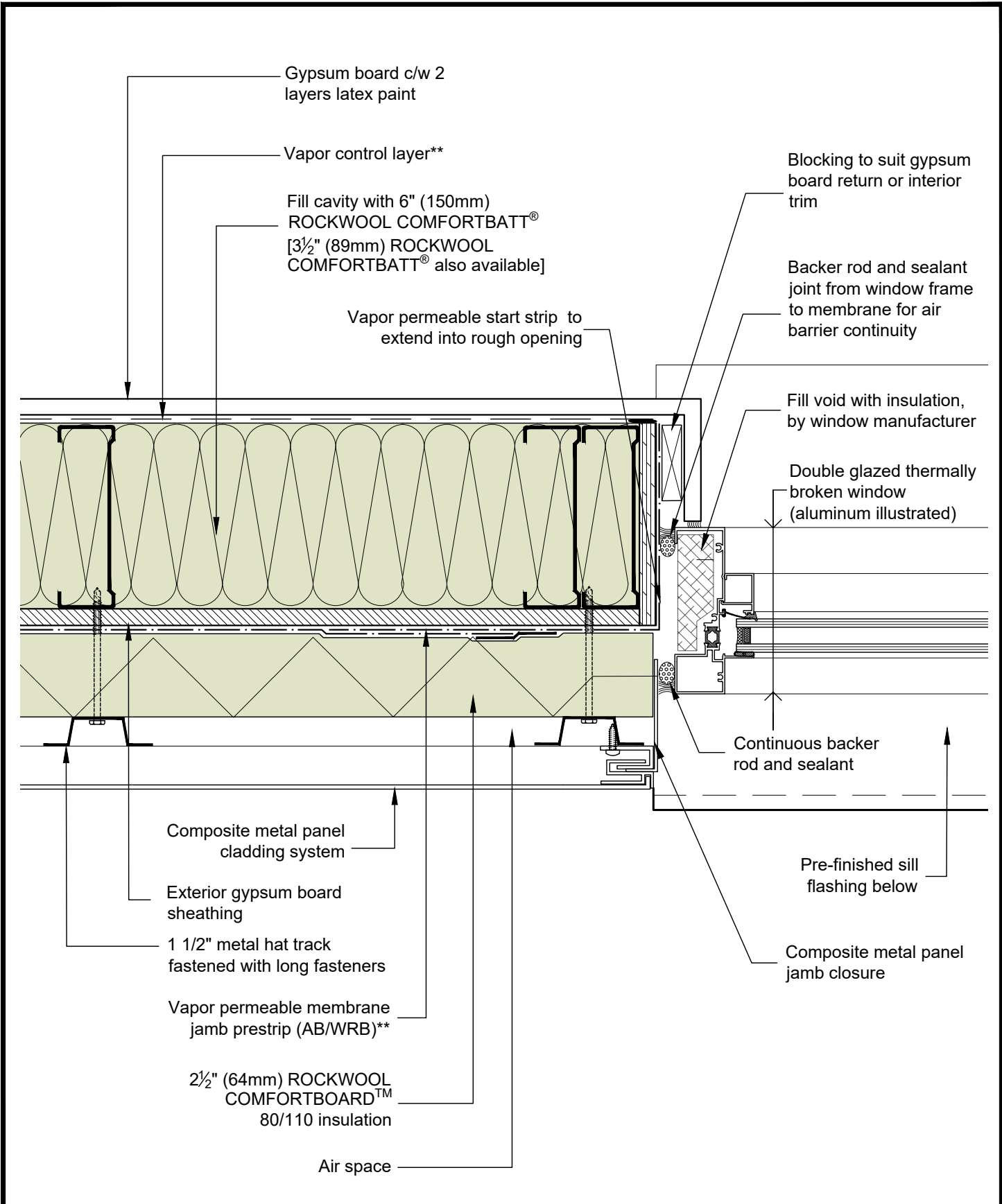
DRAWING TITLE:

TYPICAL FLANGLSS WINDOW SILL

DRAWING NO.: **Detail 09**  
 SCALE: 3" = 1'-0"  
 DATE: JUNE 2020

June 11 2020 4:23 PM

\* 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.



**COMMERCIAL STEEL FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT CLADDING**

.WEB RGB ROCKWOOL™ logo - Primary Colour.png

DRAWING TITLE:

TYPICAL FLANGLSS WINDOW JAMB

DRAWING NO.:

Detail 10

SCALE: 3" = 1'-0"

DATE: JUNE 2020

June 11 2020 4:23 PM

\* 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.