

Wood Frame Construction up to 4 Storeys: Lightweight Cladding.

Intended Use of this Document

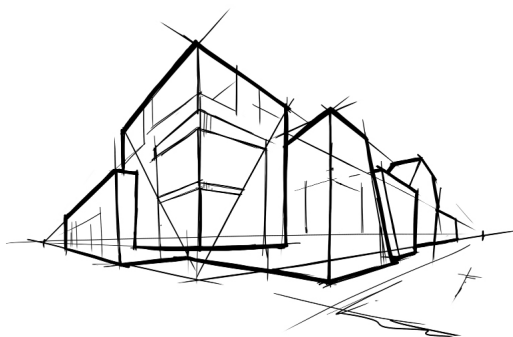
This document provides example key assembly interface details showing the use of ROCKWOOL™ products within a split-insulated wall assembly for commercial buildings up to 4 stories.

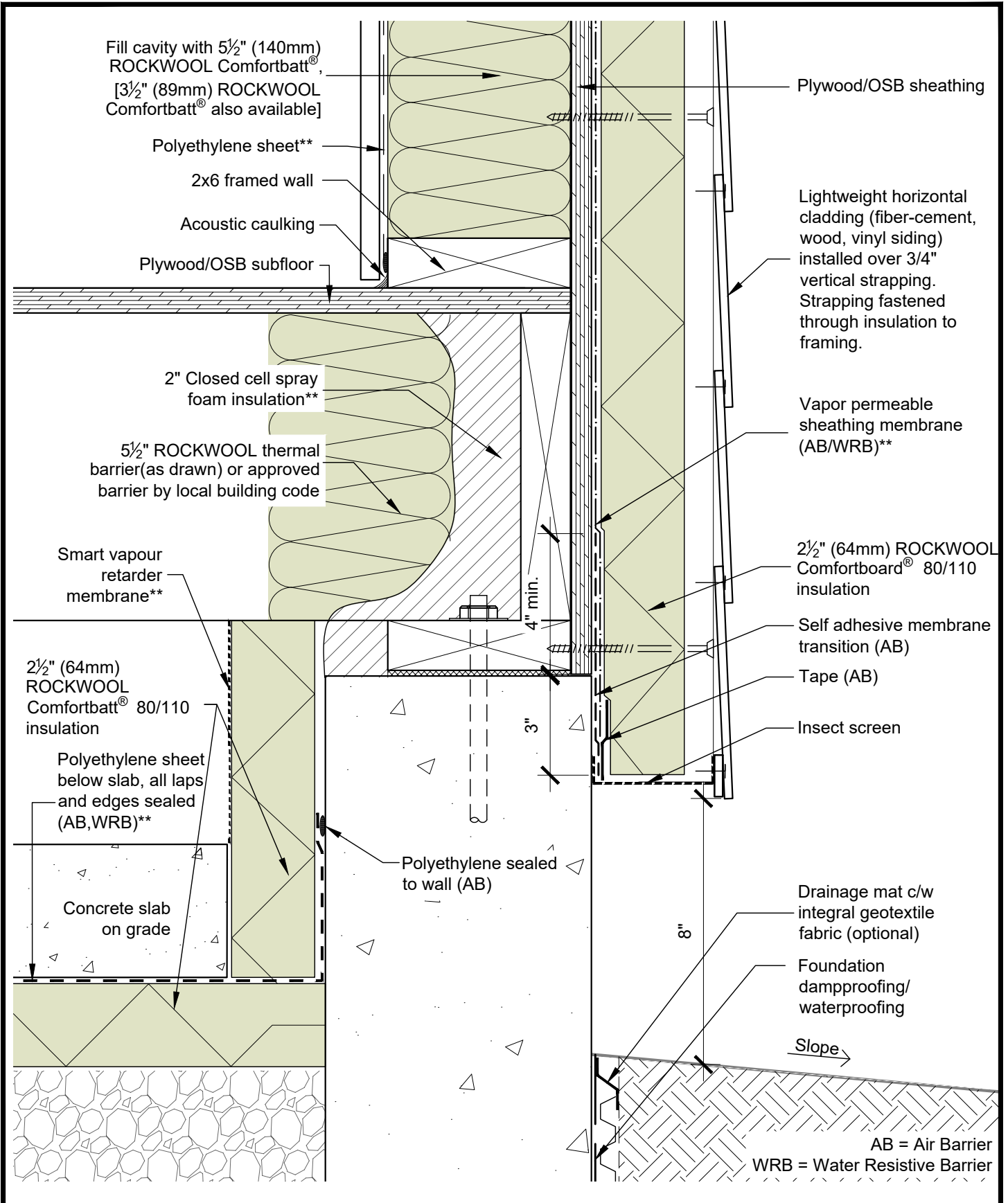
The example details could be modified for other building types or applications. The intended use has been limited to 4 stories for the sole purpose of creating boundaries around the detail development. The example details are designed to be generally applicable across North America; however, specific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





**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT FOUNDATION WALL (CRAWLSPACE)

DRAWING NO.:

SCALE: 3" = 1'-0"

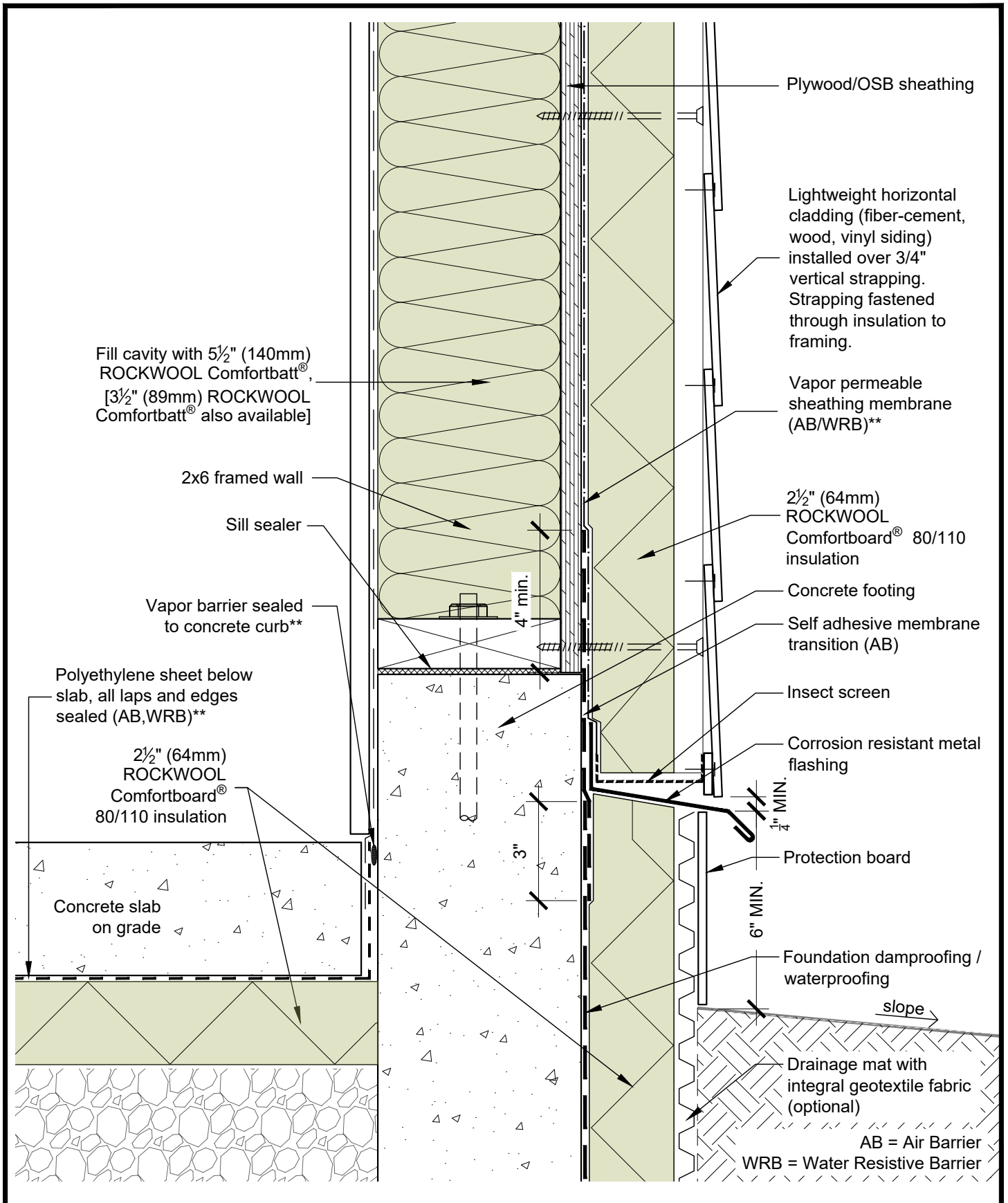
Detail 01

DATE: FEBRUARY 2025

February 12 2025 10:44 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT FOUNDATION CURB (SLAB-ON-GRADE)

DRAWING NO.:

Detail 02

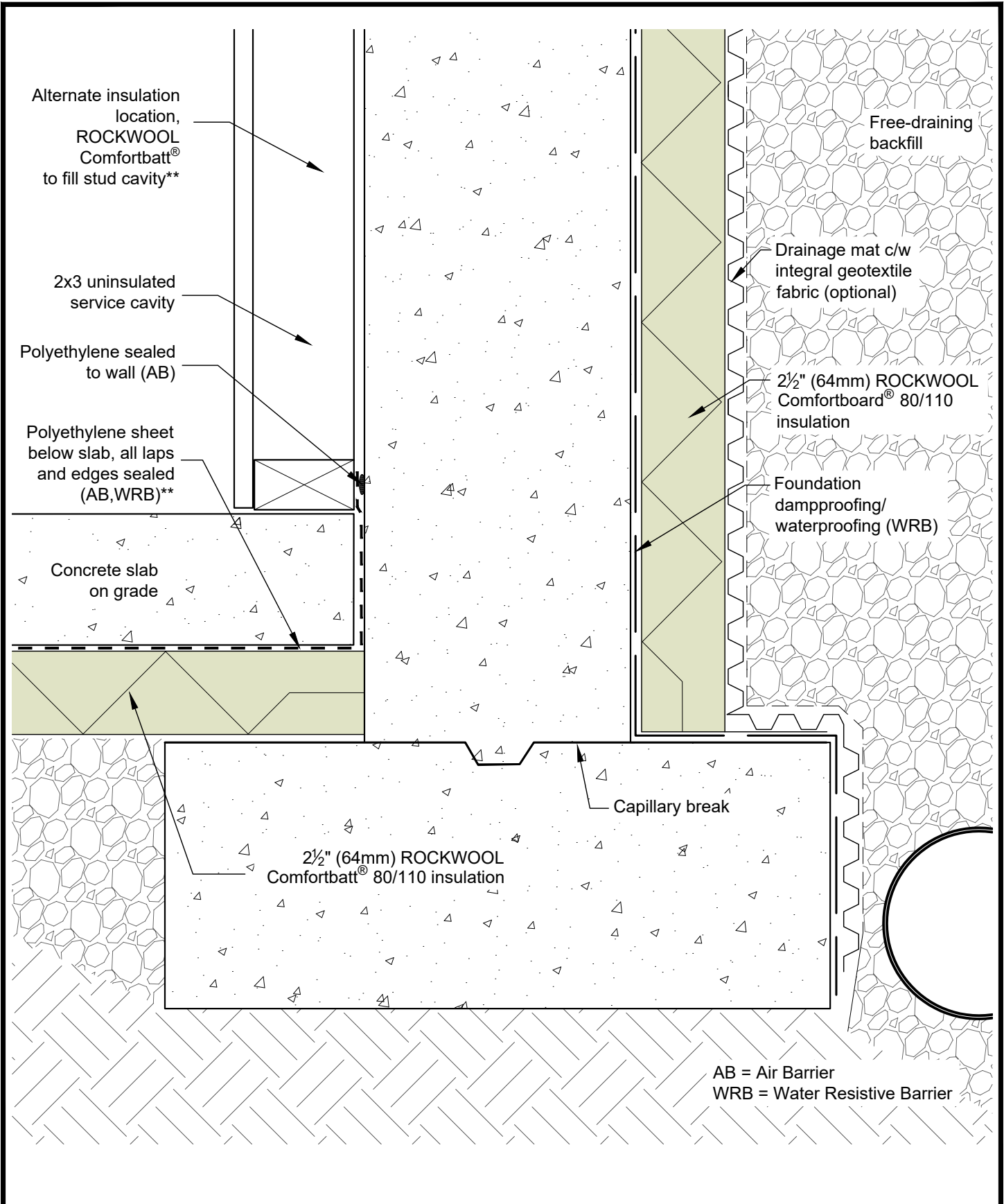
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

FOUNDATION WALL AT FOOTING (BASEMENT)

DRAWING NO.:

Detail 03

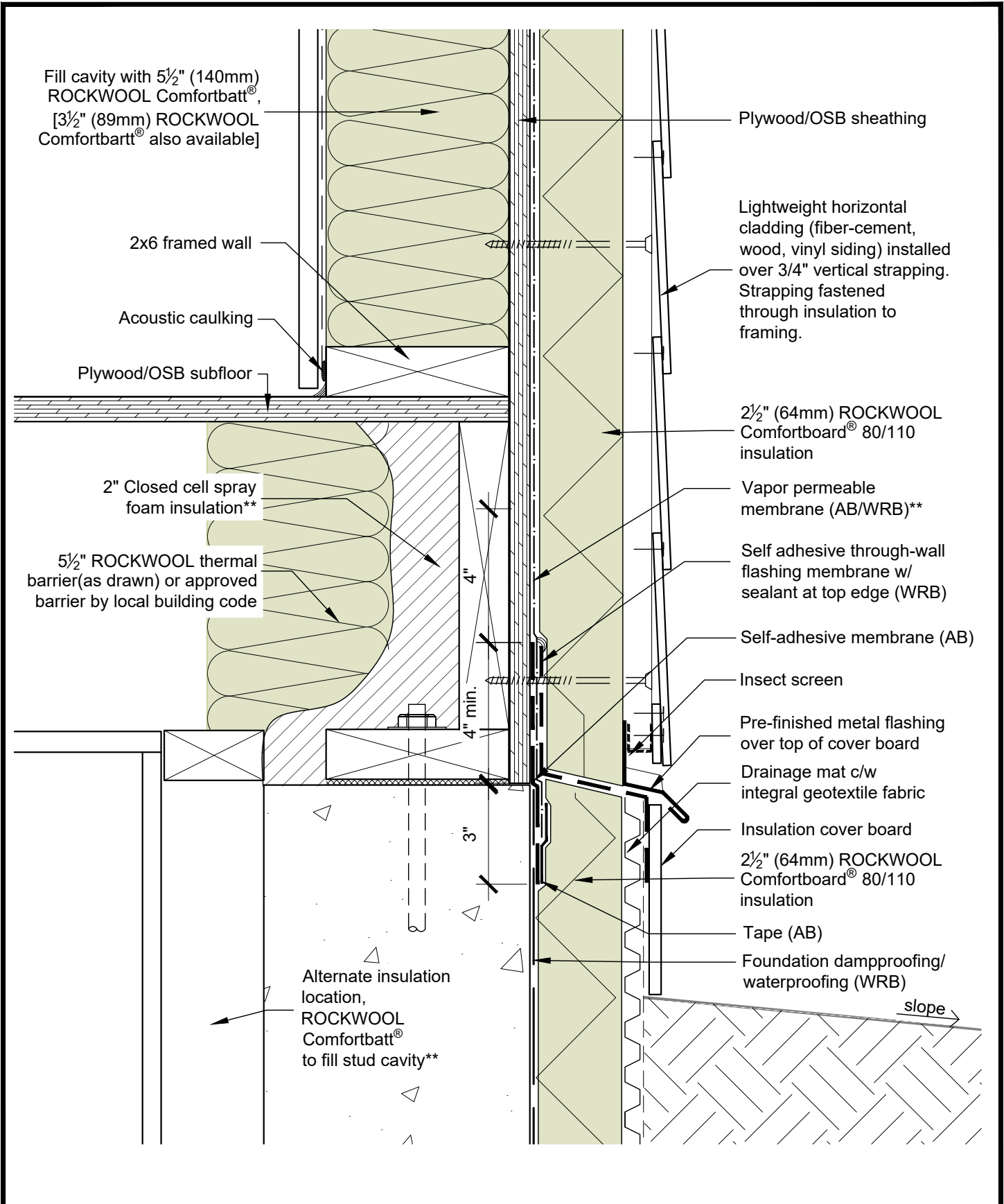
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



Fill cavity with 5½" (140mm) ROCKWOOL Comfortbatt®, [3½" (89mm) ROCKWOOL Comfortbatt® also available]

2x6 framed wall

Acoustic caulking

Plywood/OSB subfloor

2" Closed cell spray foam insulation**

5½" ROCKWOOL thermal barrier (as drawn) or approved barrier by local building code

Plywood/OSB sheathing

Lightweight horizontal cladding (fiber-cement, wood, vinyl siding) installed over ¾" vertical strapping. Strapping fastened through insulation to framing.

2½" (64mm) ROCKWOOL Comfortboard® 80/110 insulation

Vapor permeable membrane (AB/WRB)**

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

Self-adhesive membrane (AB)

Insect screen

Pre-finished metal flashing over top of cover board

Drainage mat c/w integral geotextile fabric

Insulation cover board

2½" (64mm) ROCKWOOL Comfortboard® 80/110 insulation

Tape (AB)

Foundation dampproofing/ waterproofing (WRB)

Alternate insulation location, ROCKWOOL Comfortbatt® to fill stud cavity**

slope

**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING TITLE:

TYPICAL WALL AT FOUNDATION WALL (BASEMENT)

DRAWING NO.:

Detail 04

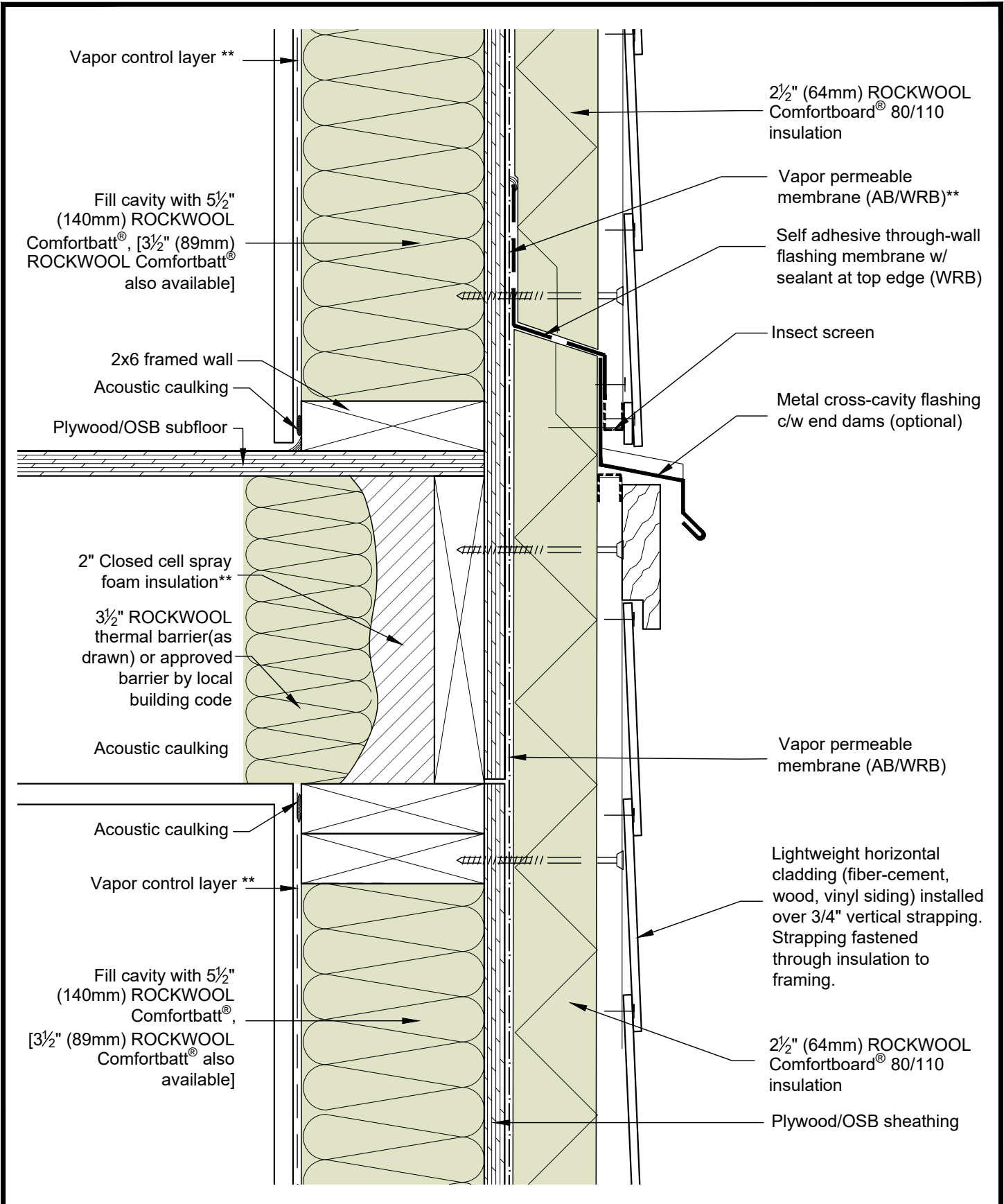
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT FLOOR

DRAWING NO.:

SCALE: 3" = 1'-0"

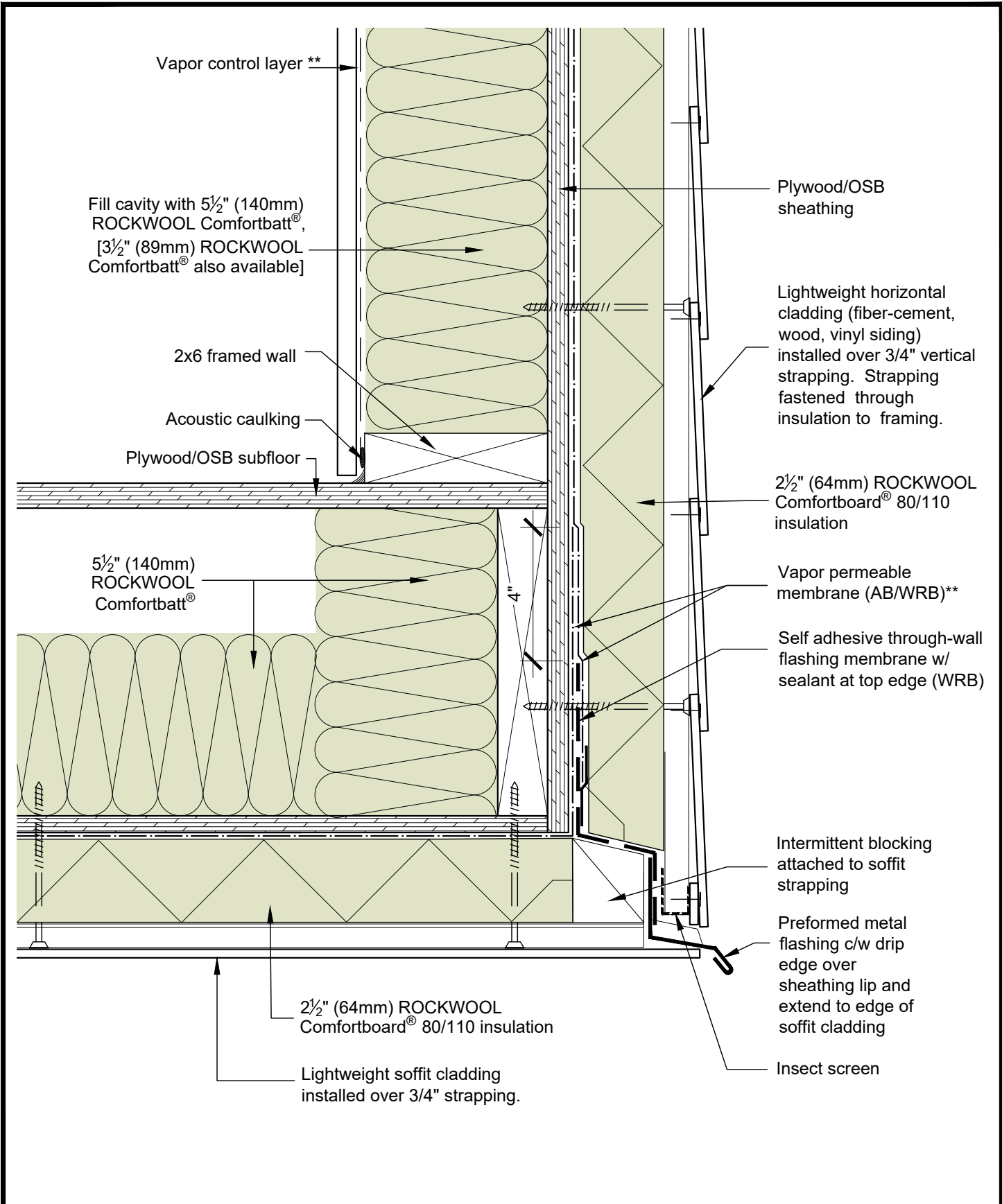
Detail 05

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT CANTILEVERED FLOOR

DRAWING NO.:

Detail 06

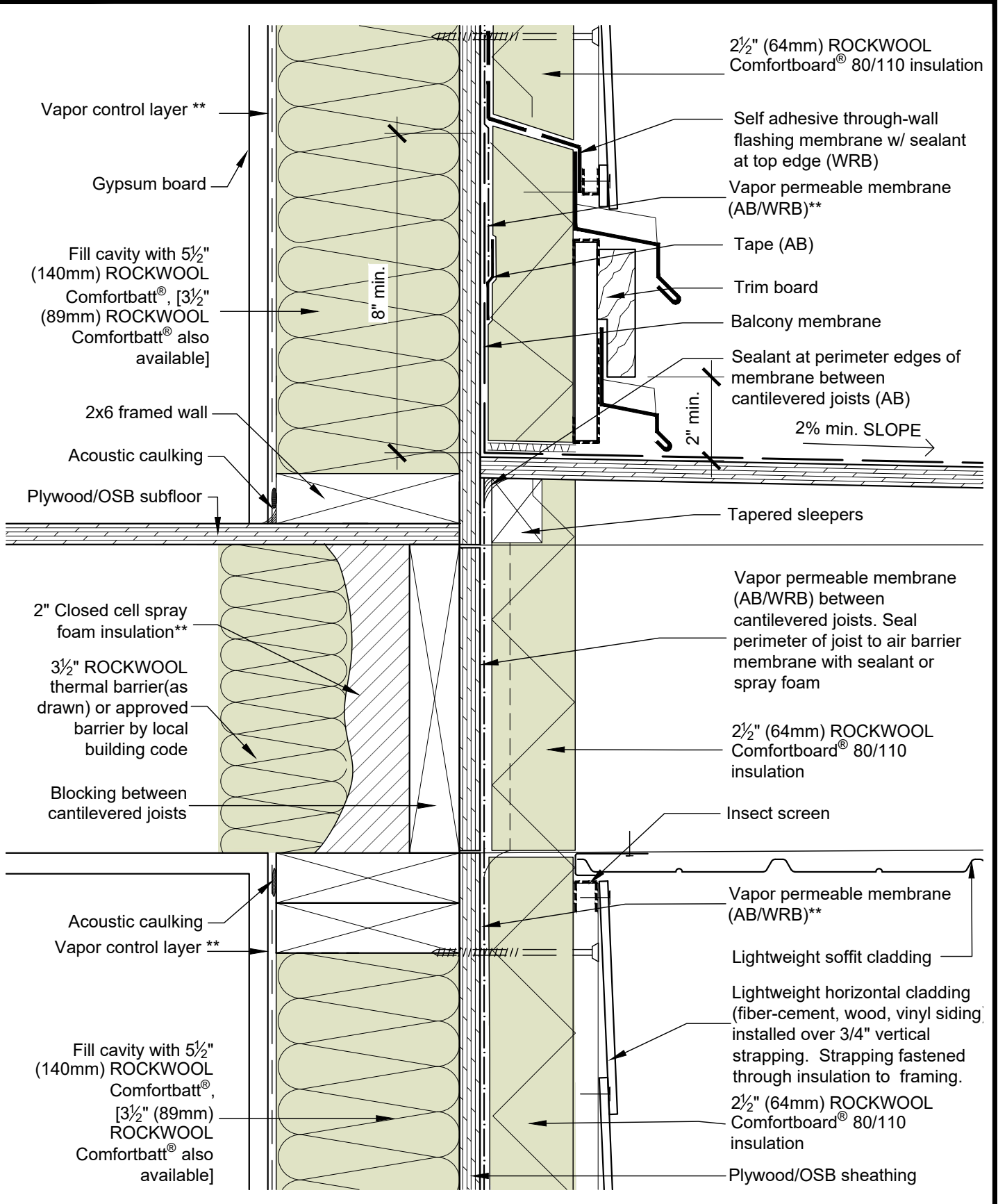
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT CANTILEVERED BALCONY

DRAWING NO.:

SCALE: 3" = 1'-0"

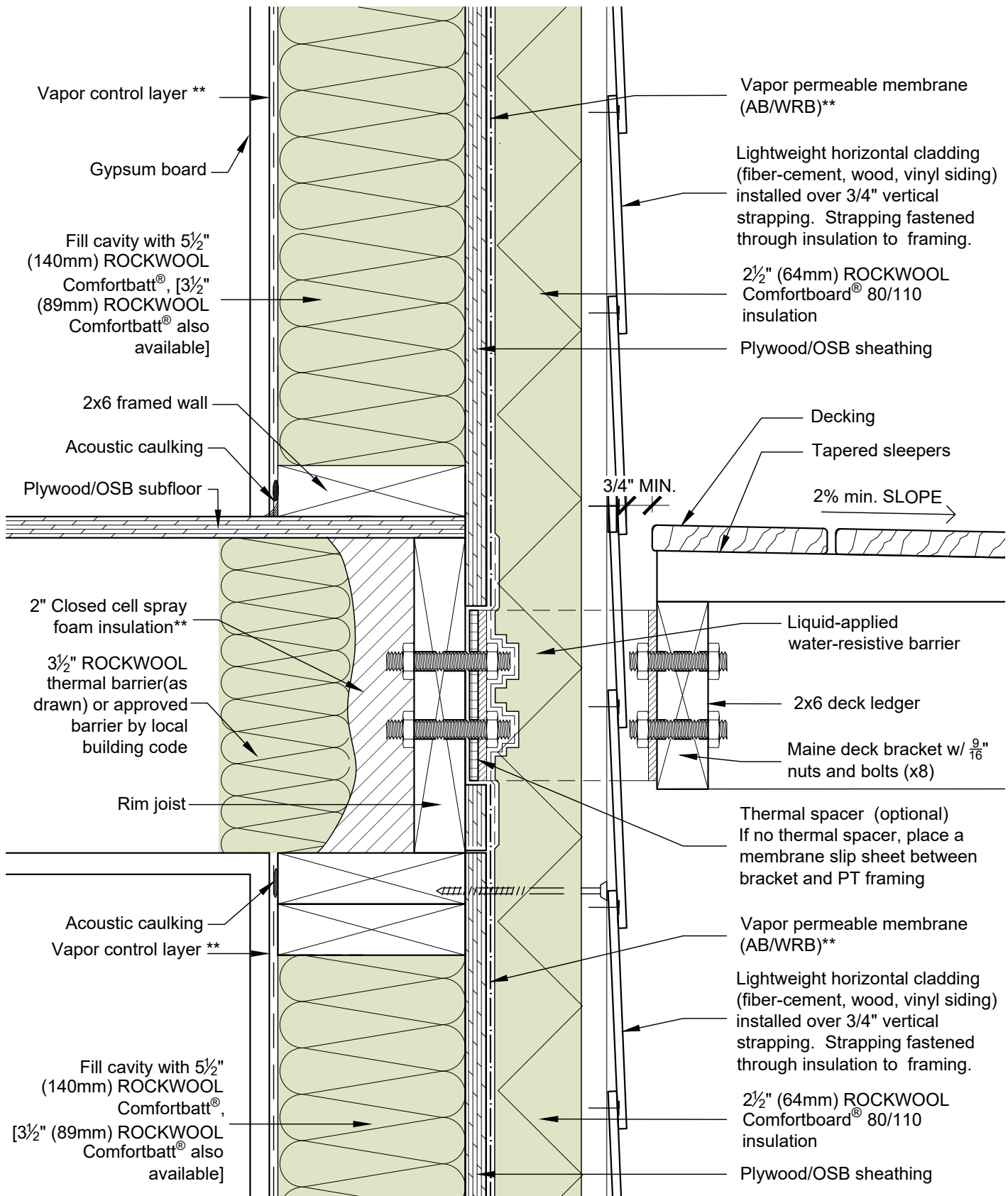
Detail 07

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT BALCONY (MAINE DECK BRACKET)

DRAWING NO.:

SCALE: 3" = 1'-0"

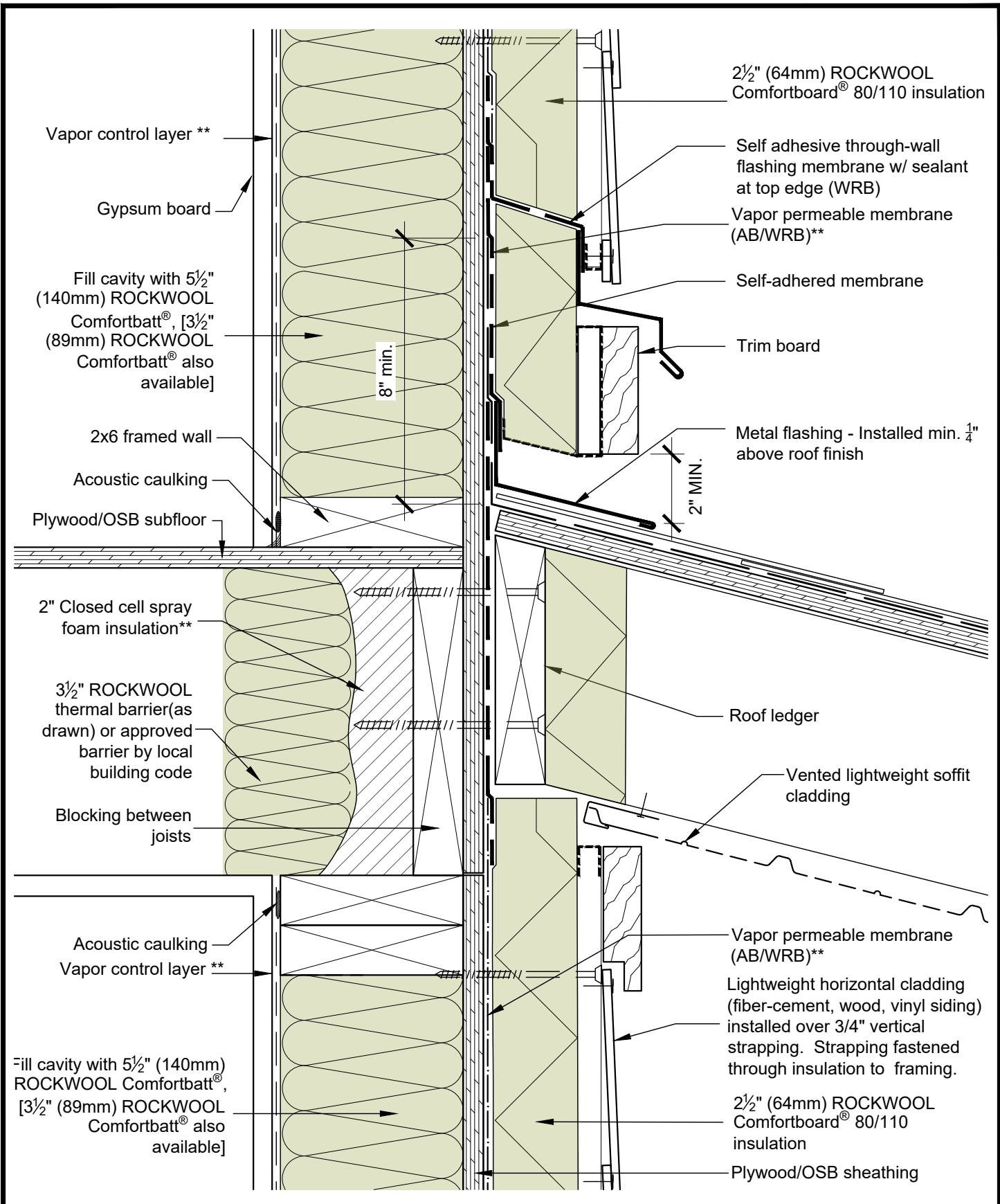
Detail 08

DATE: FEBRUARY 2025

February 12 2025 10:44 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL WALL AT PORCH OVERHANG

DRAWING NO.:

SCALE: 3" = 1'-0"

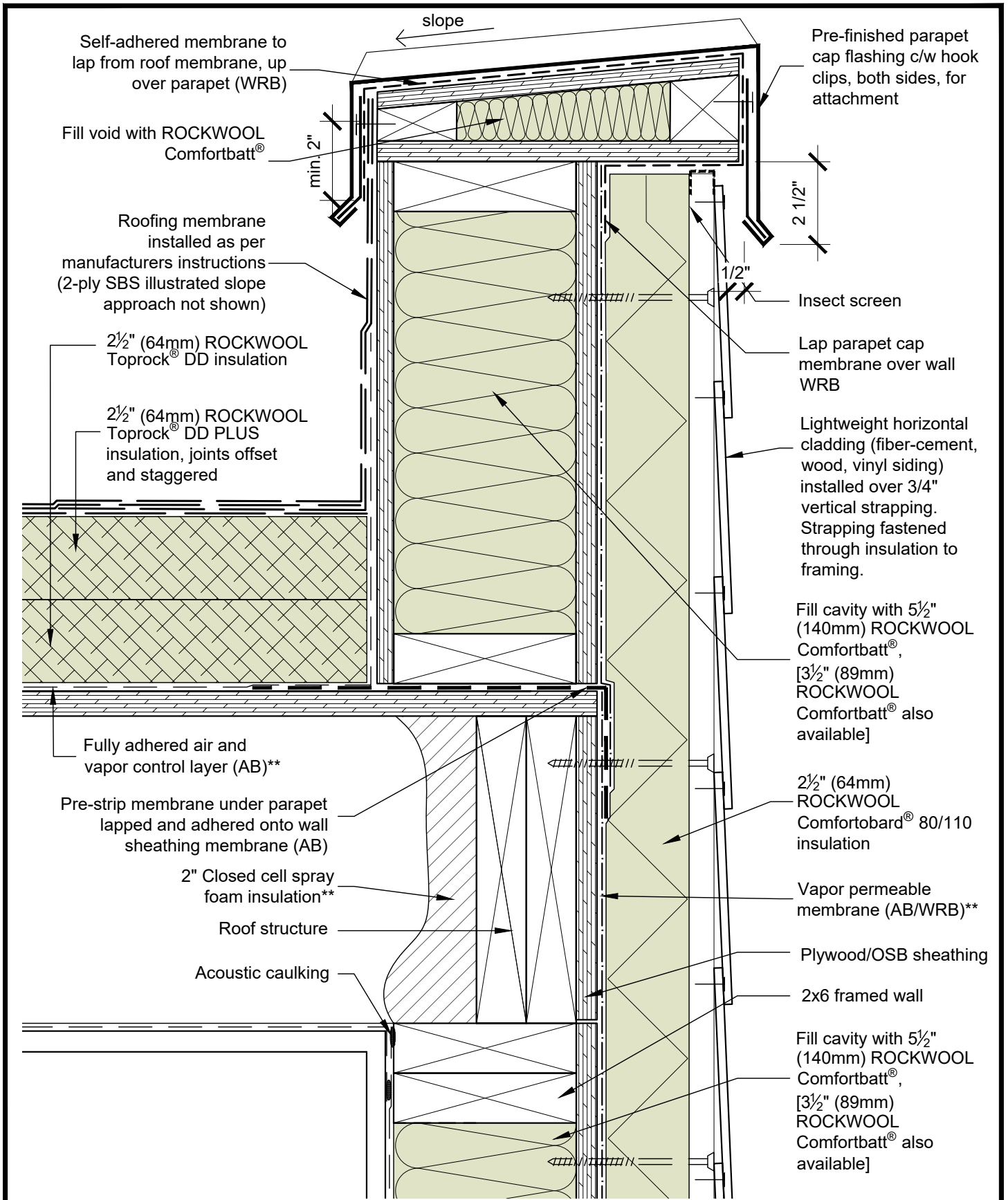
Detail 09

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL ROOF PARAPET AT LOW SLOPE ROOF

DRAWING NO.:

Detail 10

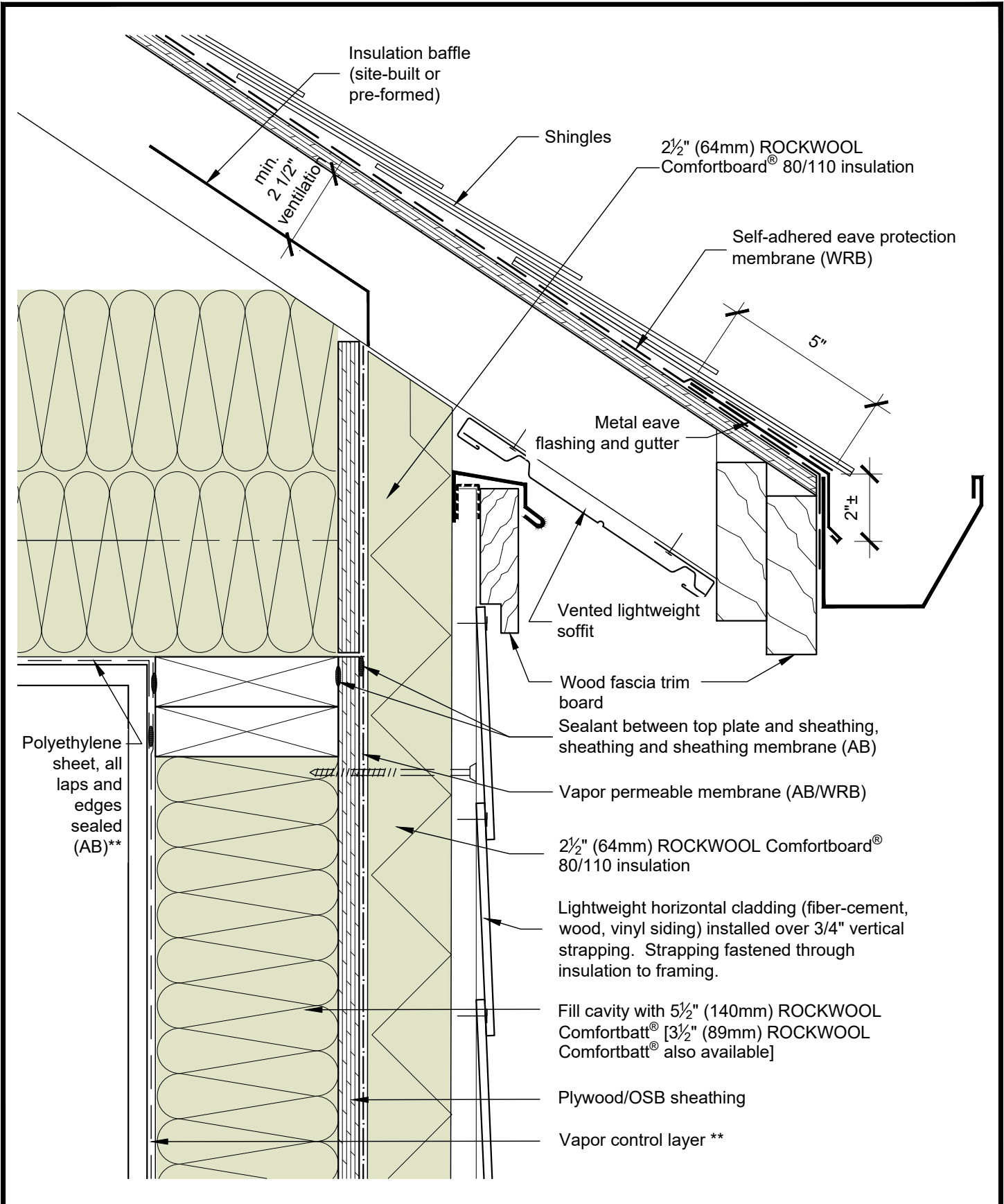
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:46 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL SLOPE ROOF (ATTIC) AT EAVE #1

DRAWING NO.:

SCALE: 3" = 1'-0"

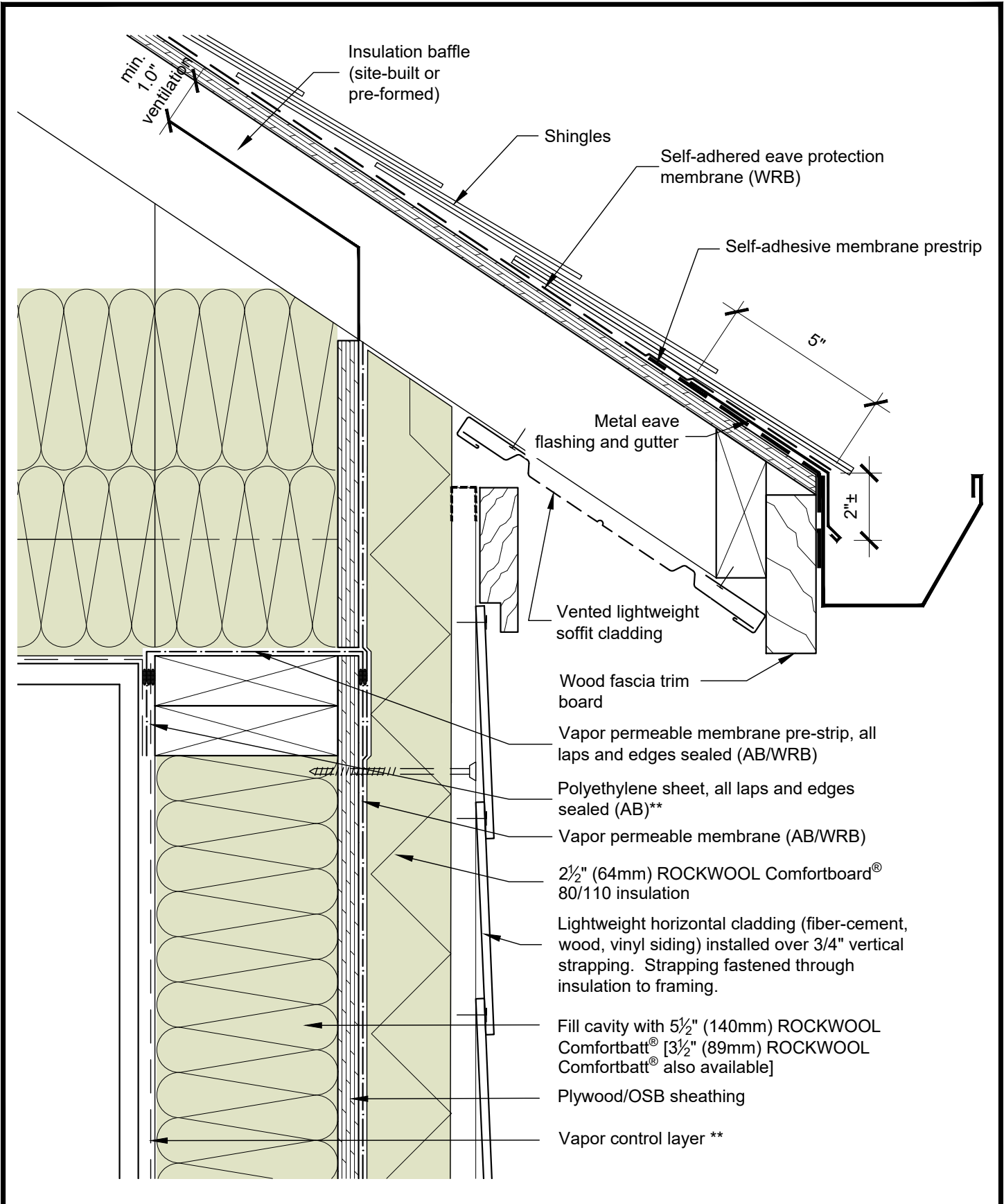
Detail 11

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL SLOPE ROOF (ATTIC) AT EAVE #2

DRAWING NO.:

SCALE: 3" = 1'-0"

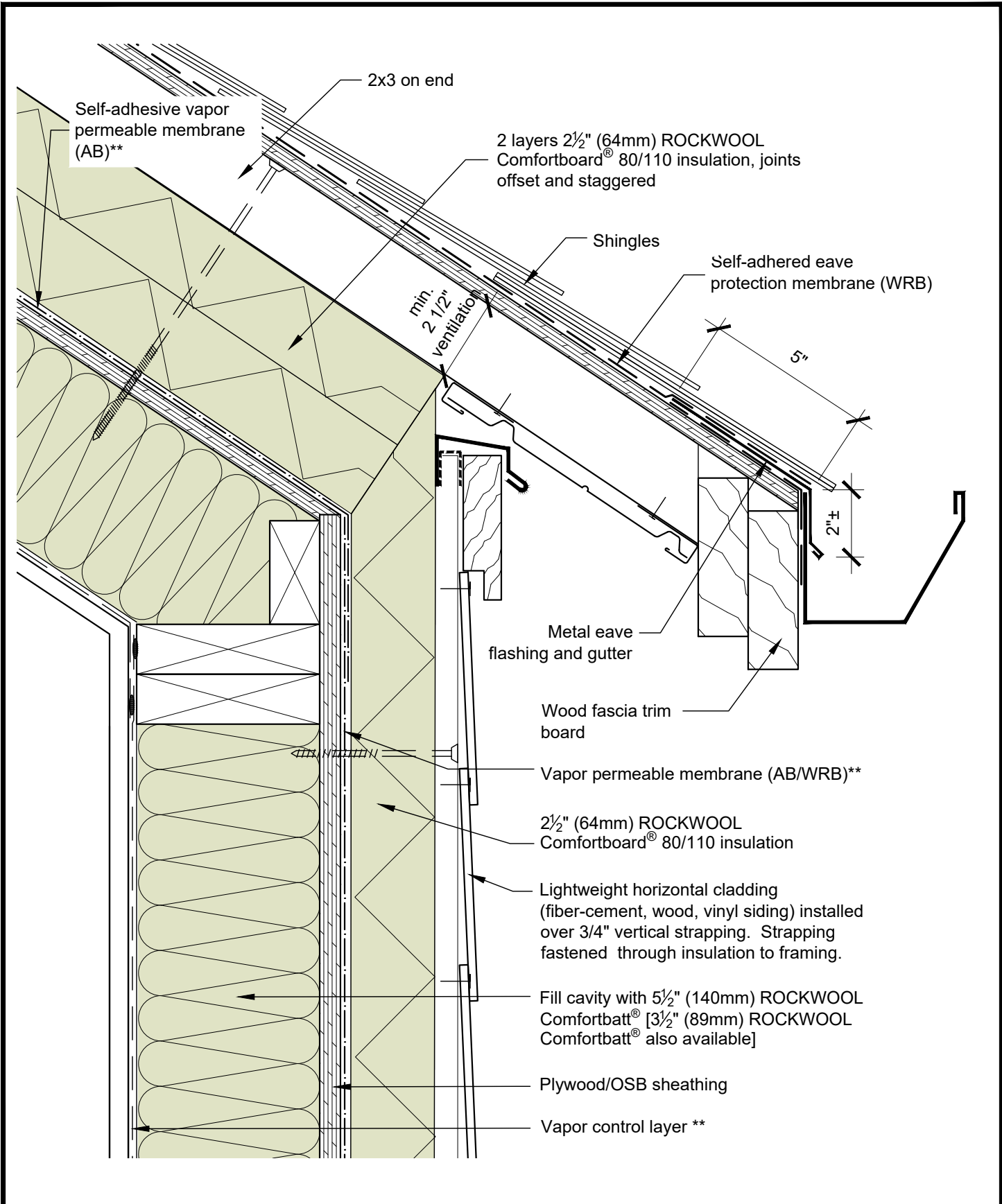
Detail 12

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL SLOPE ROOF (CATHEDRAL) AT EAVE

DRAWING NO.:

Detail 13

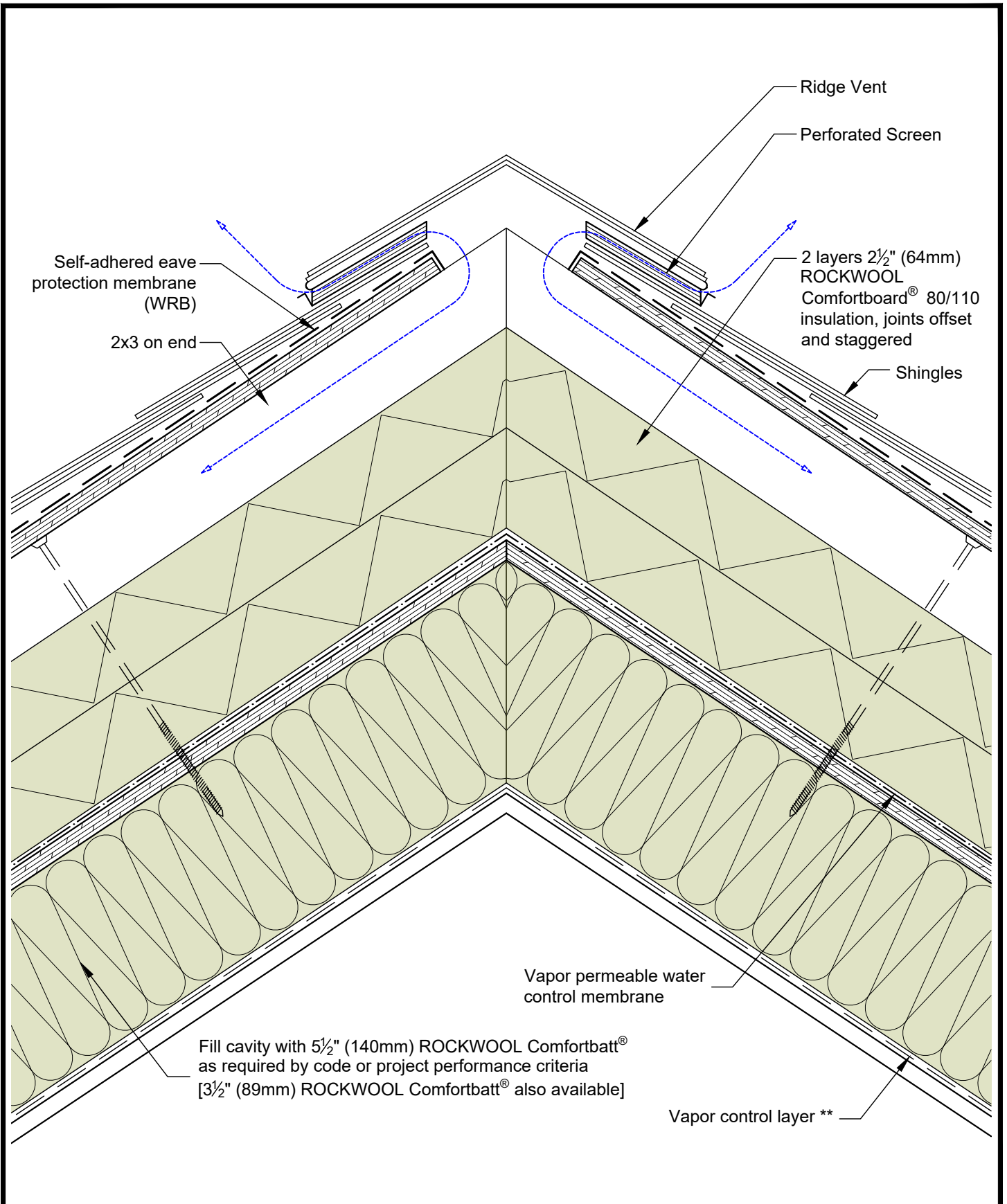
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL SLOPE ROOF (CATHEDRAL) AT RIDGE

DRAWING NO.:

Detail 14

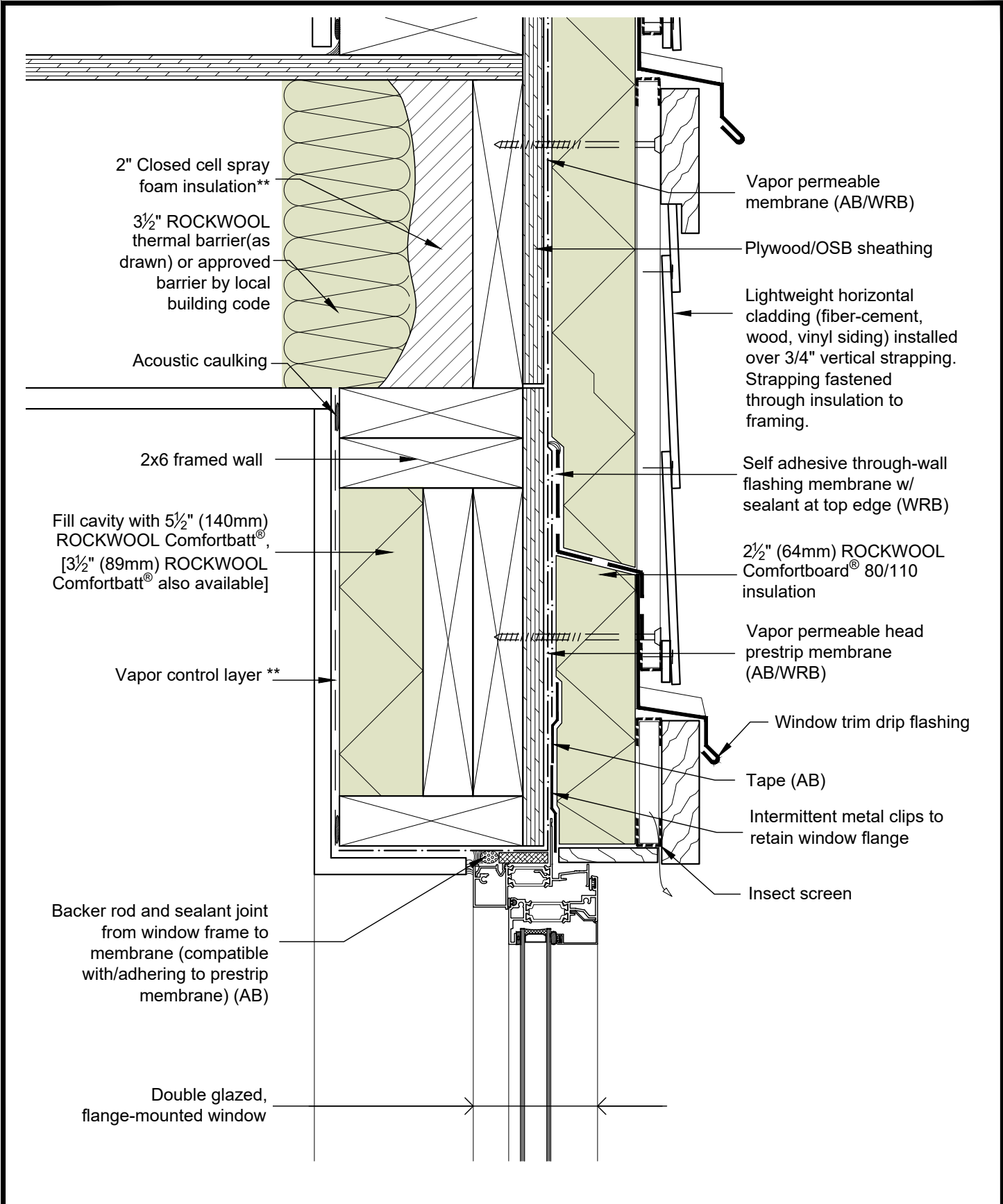
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL FLANGE-MOUNTED WINDOW HEAD

DRAWING NO.:

Detail 15

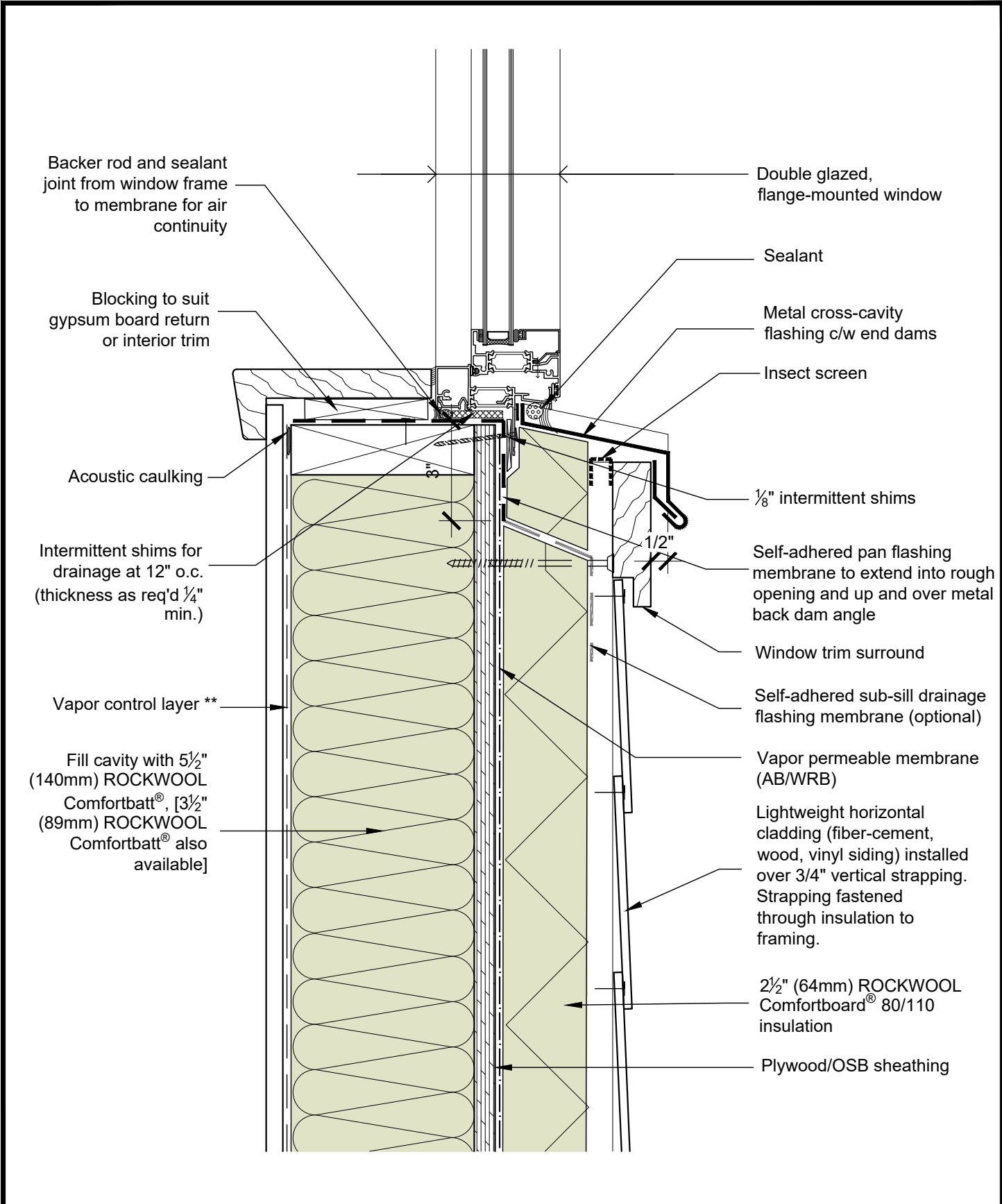
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL FLANGE-MOUNTED WINDOW SILL

DRAWING NO.:

SCALE: 3" = 1'-0"

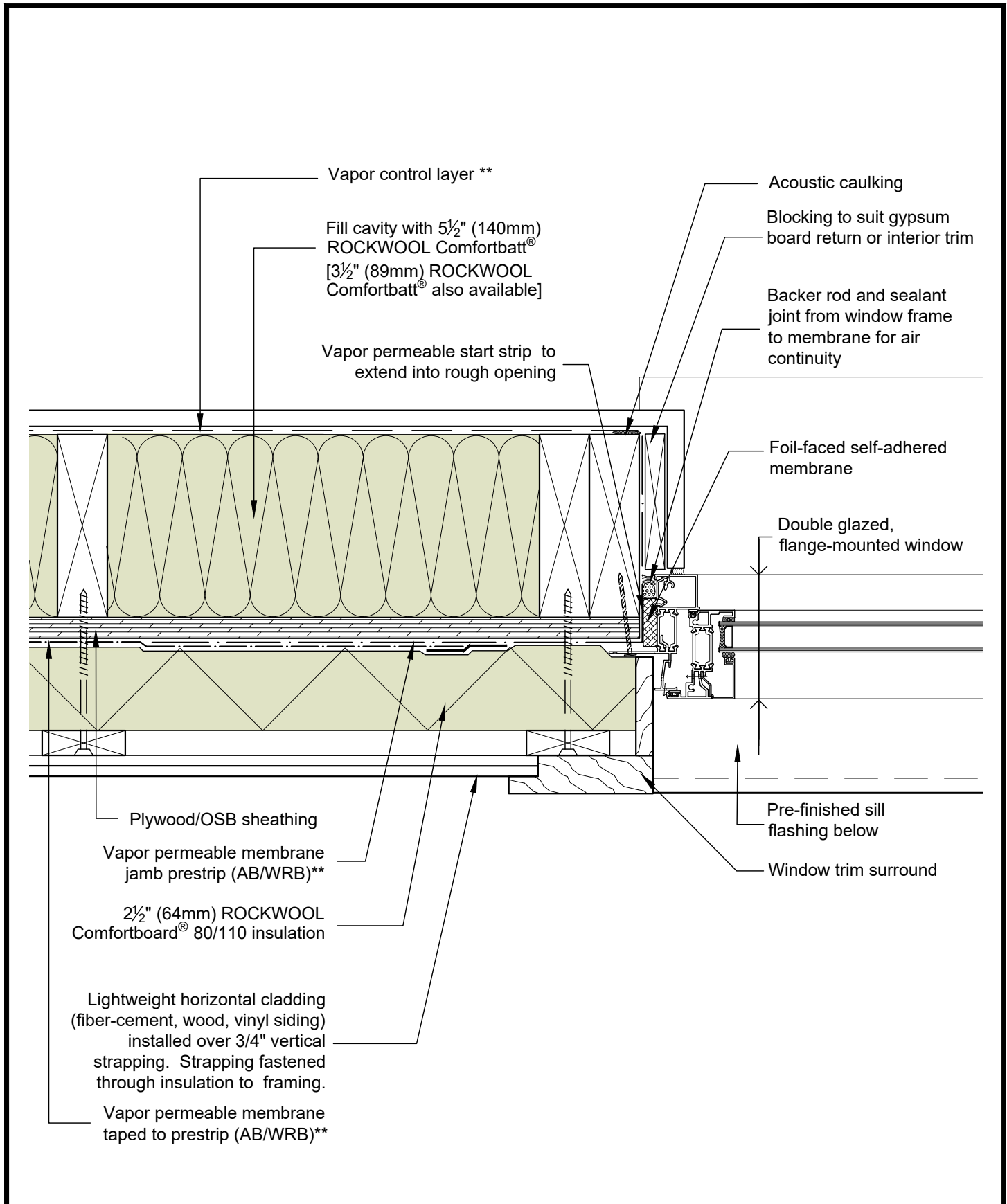
Detail 16

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL FLANGE-MOUNTED WINDOW JAMB

DRAWING NO.:

SCALE: 3" = 1'-0"

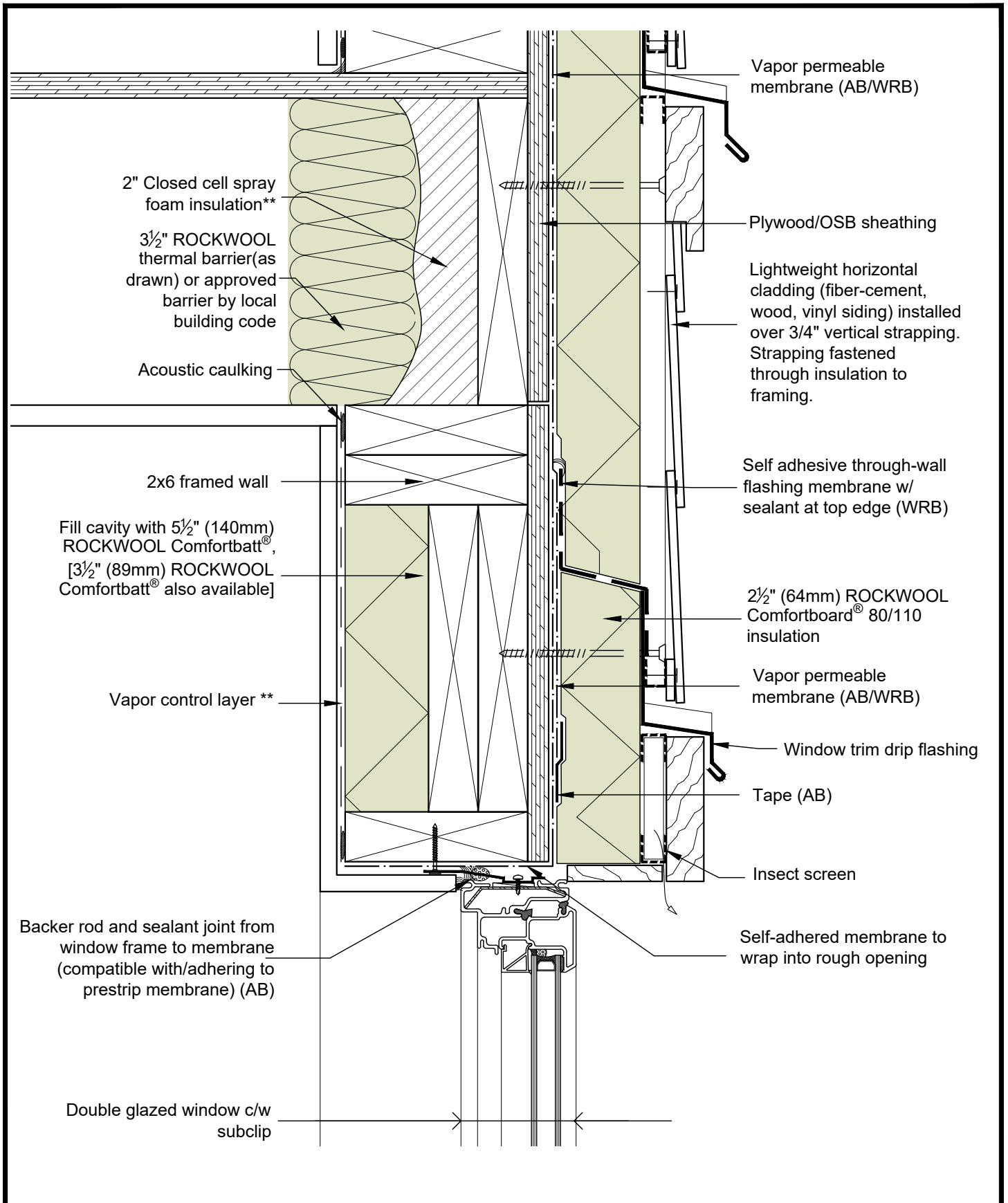
Detail 17

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL FLANGELESS WINDOW HEAD

DRAWING NO.:

SCALE: 3" = 1'-0"

Detail 18

DATE: FEBRUARY 2025

February 12 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.

Sealant joint from window frame to membrane/angle for air continuity

Continuous metal back dam angle

Blocking to suit gypsum board return or interior trim

Acoustic caulking

Intermittent shims for drainage at 12" o.c. (thickness as req'd 1/4" min.)

Vapor control layer **

Fill cavity with 5 1/2" (140mm) ROCKWOOL Comfortbatt® [3 1/2" (89mm) ROCKWOOL Comfortbatt® also available]

Double glazed window c/w subclip

Sealant

Metal cross-cavity flashing c/w end dams

Insect screen

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

Window trim surround

Self-adhered sub-sill drainage flashing membrane (optional)

Vapor permeable membrane (AB/WRB)**

Lightweight horizontal cladding (fiber-cement, wood, vinyl siding) installed over 3/4" vertical strapping. Strapping fastened through insulation to framing.

2 1/2" (64mm) ROCKWOOL Comfortboard® 80/110 insulation

Plywood/OSB sheathing

WOOD FRAME CONSTRUCTION UP TO 4 STOREYS - LIGHTWEIGHT HORIZONTAL CLADDING



DRAWING TITLE:

TYPICAL FLANGELESS WINDOW SILL

DRAWING NO.:

Detail 19

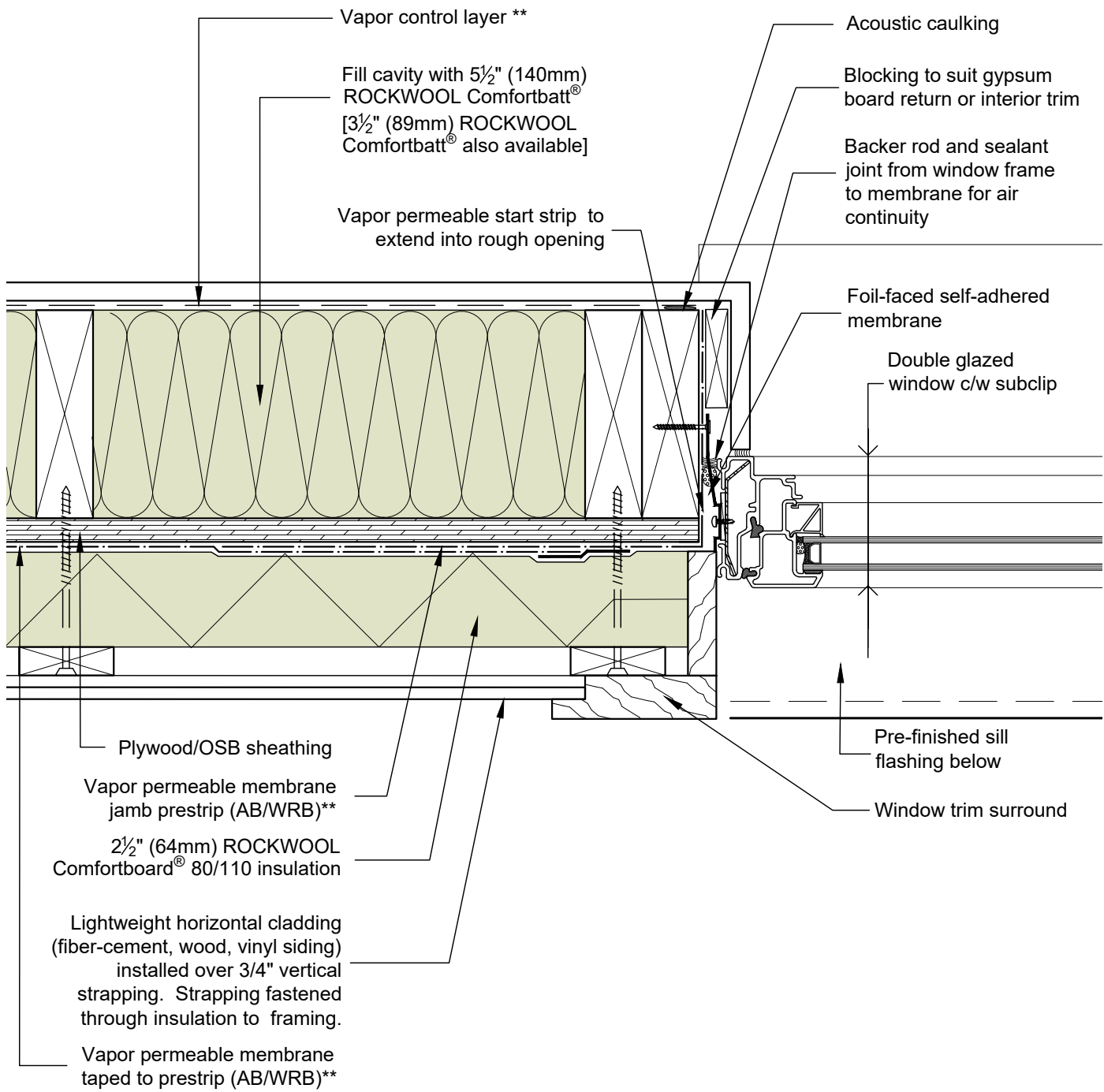
SCALE: 3" = 1'-0"

DATE: FEBRUARY 2025

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.

February 12 2025 10:45 AM



**WOOD FRAME CONSTRUCTION UP TO 4 STOREYS
- LIGHTWEIGHT HORIZONTAL CLADDING**



DRAWING
TITLE:

TYPICAL FLANGELESS WINDOW JAMB

DRAWING NO.:

SCALE: 3" = 1'-0"

Detail 20

DATE: FEBRUARY 2025

February 12, 2025 10:45 AM

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

** Interior vapor control for cold climates shown. For further climate zone specific considerations for thermal, air and vapor control methodologies and requirements, please contact ROCKWOOL™ Building Science.