

# Existing multi-wythe masonry retrofit with interior insulation.

## Intended Use of this Document

This document provides example key assembly interface details showing the use of ROCKWOOL® products within an interior insulation retrofit of a multi-wythe masonry residential or institutional building up to 3 stories.

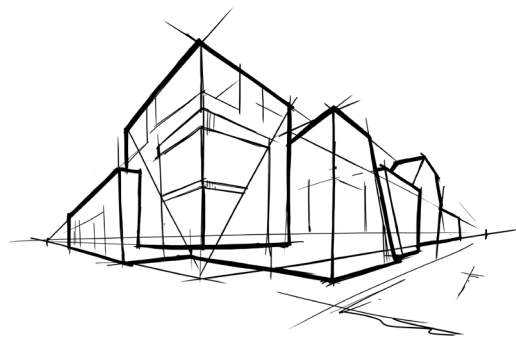
The example details could be modified for other building types or applications. The intended use has been limited to 3 story residential and institutional buildings for the sole purpose of creating boundaries around the detail development. The example details are designed to be generally applicable across 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. Interior insulation will change the temperature profile and drying capacity of the wall assembly. Therefore, the amount of insulation appropriate for any given building is dependent upon the condition of the existing masonry, its exposure to wetting, and its susceptibility to freeze thaw damage. Each building must be evaluated independently, using appropriate methods (visual review, masonry testing, etc) to develop an appropriate solution that addresses these inherent risks.

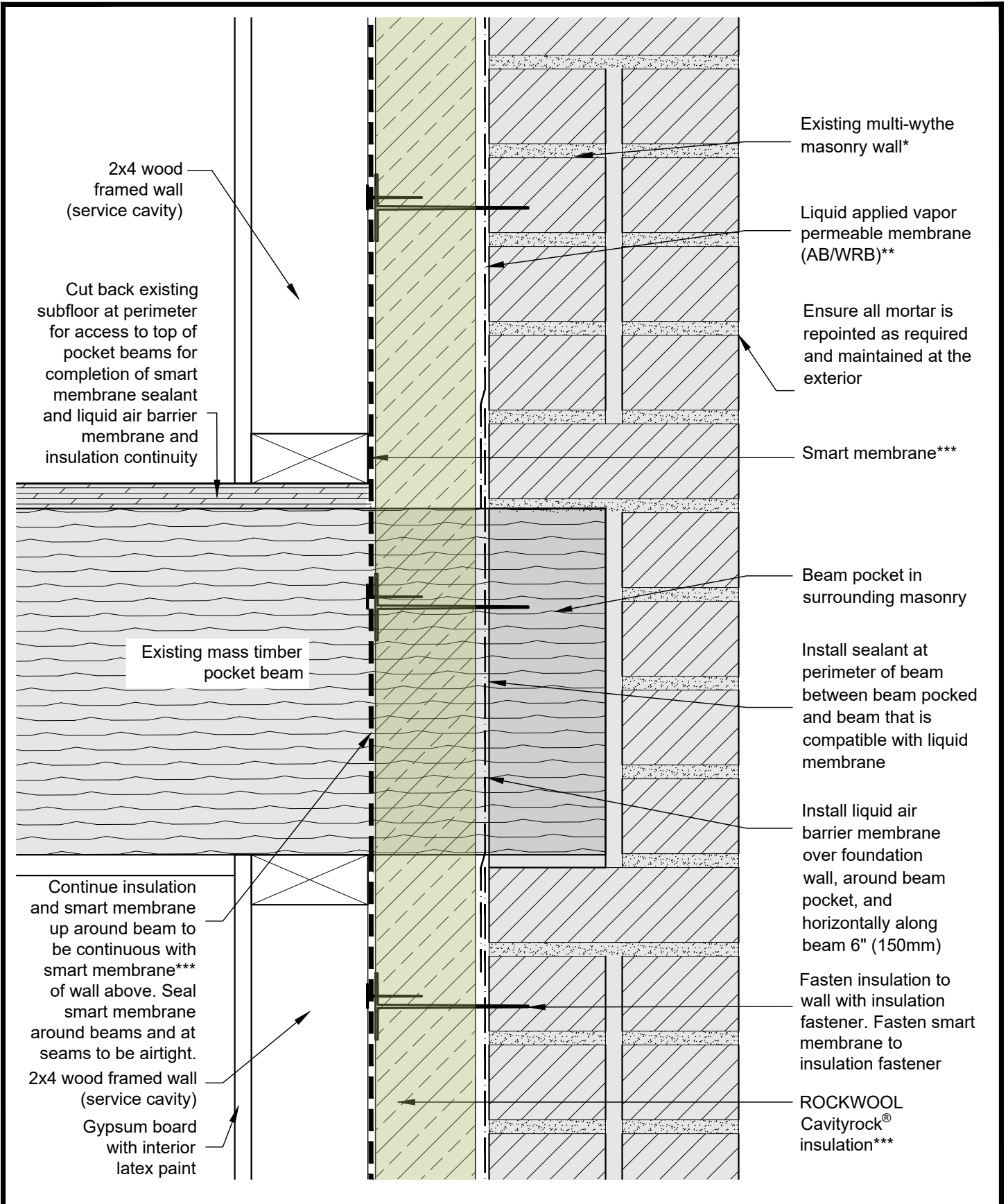
These example details are intended to provide architects, builders, and contractors with general guidance on the best practice approach to maintain:

- 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 assembly.

It is important to note these details show one method of retrofitting an existing multi-wythe masonry wall from the interior; 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.

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**EXISTING MASONRY RETROFIT**



DRAWING  
TITLE:

**TYPICAL WALL SECTION AT FLOOR LEVEL**

DRAWING NO.:

SCALE: 3" = 1'-0"

**Detail 01**

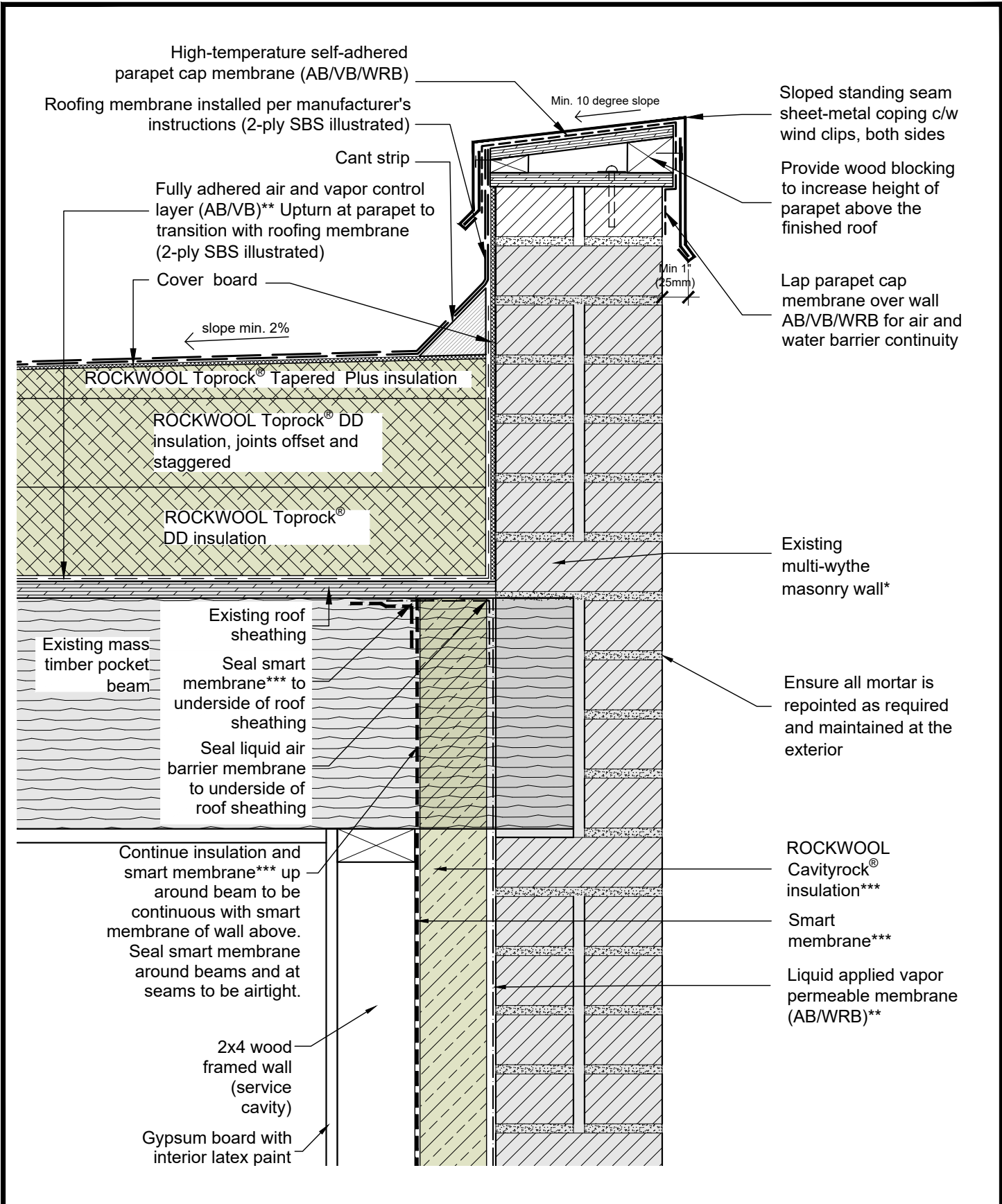
DATE: APRIL 2024

April 09 2024 5:05 PM

\* For project specific masonry assemblies, please contact ROCKWOOL® Building Science Support

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

\*\*\*ROCKWOOL Smartrock® as alternative to ROCKWOOL Cavityrock® and Smart vapour retarder



**EXISTING MASONRY RETROFIT**



DRAWING  
TITLE:

**TYPICAL LOW SLOPE ROOF PARAPET SECTION**

DRAWING NO.:

SCALE: 2" = 1'-0"

**Detail 02**

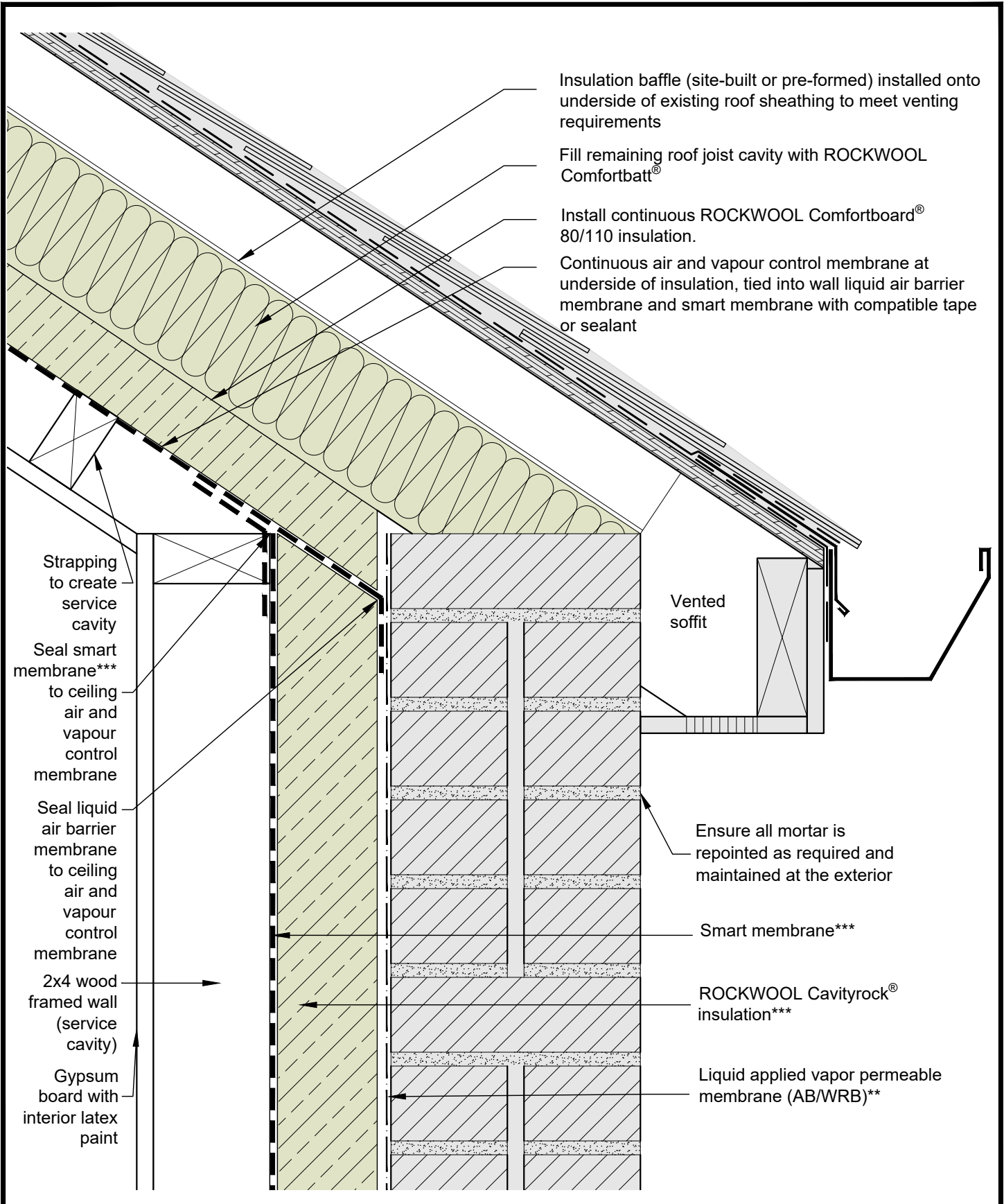
DATE: APRIL 2024

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**EXISTING MASONRY RETROFIT**



DRAWING TITLE:

**ABOVE GRADE WALL TO SLOPED ROOF (CATHEDRAL)**

DRAWING NO.:

**Detail 03**

SCALE: 3" = 1'-0"

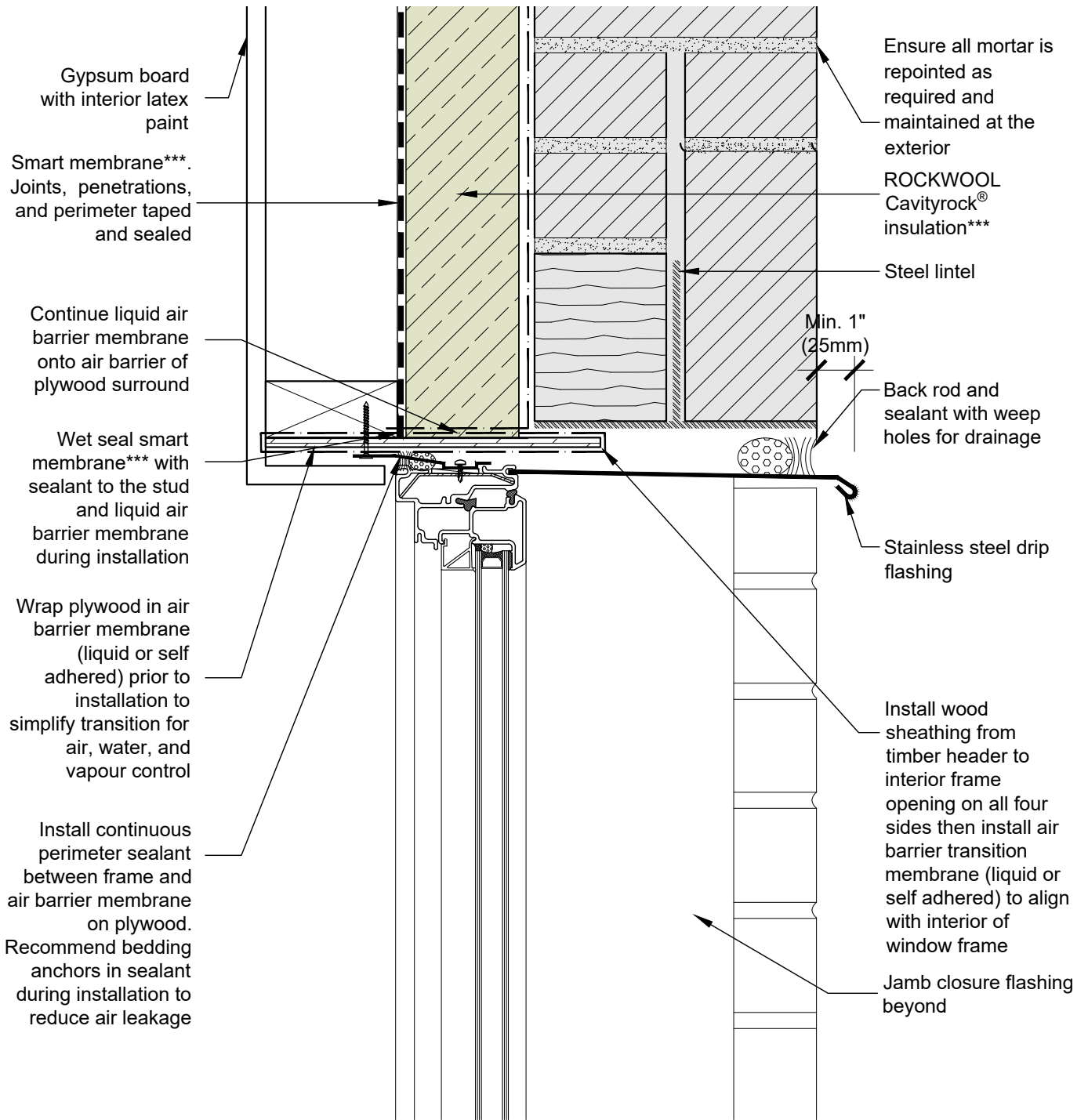
DATE: APRIL 2024

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**EXISTING MASONRY RETROFIT**



DRAWING  
TITLE:

**TYPICAL PUNCHED WINDOW HEAD SECTION**

DRAWING NO.:

SCALE: 3" = 1'-0"

**Detail 04**

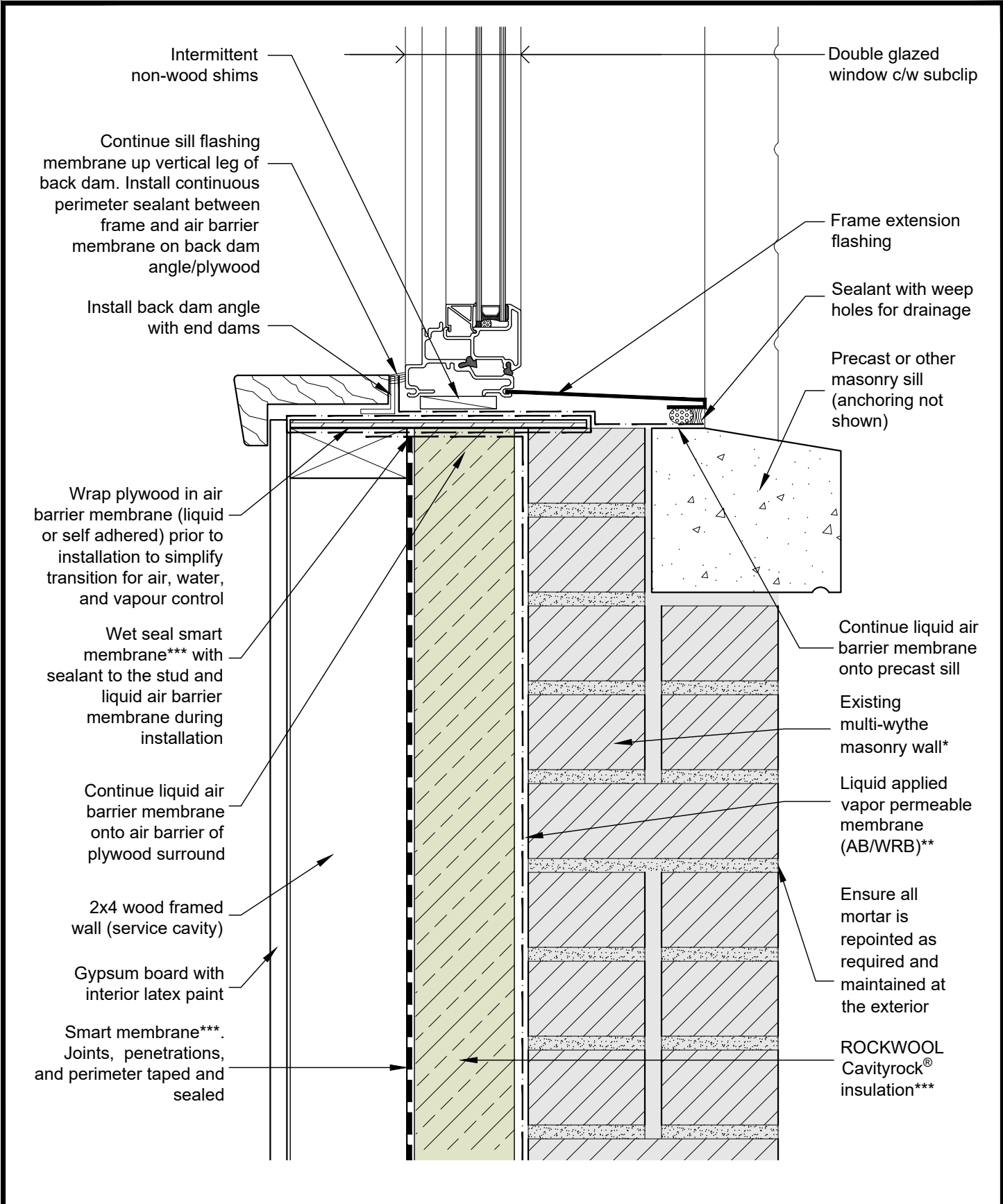
DATE: APRIL 2024

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**EXISTING MASONRY RETROFIT**



DRAWING  
TITLE:

**TYPICAL PUNCHED WINDOW SILL SECTION**

DRAWING NO.:

SCALE: 3" = 1'-0"

**Detail 05**

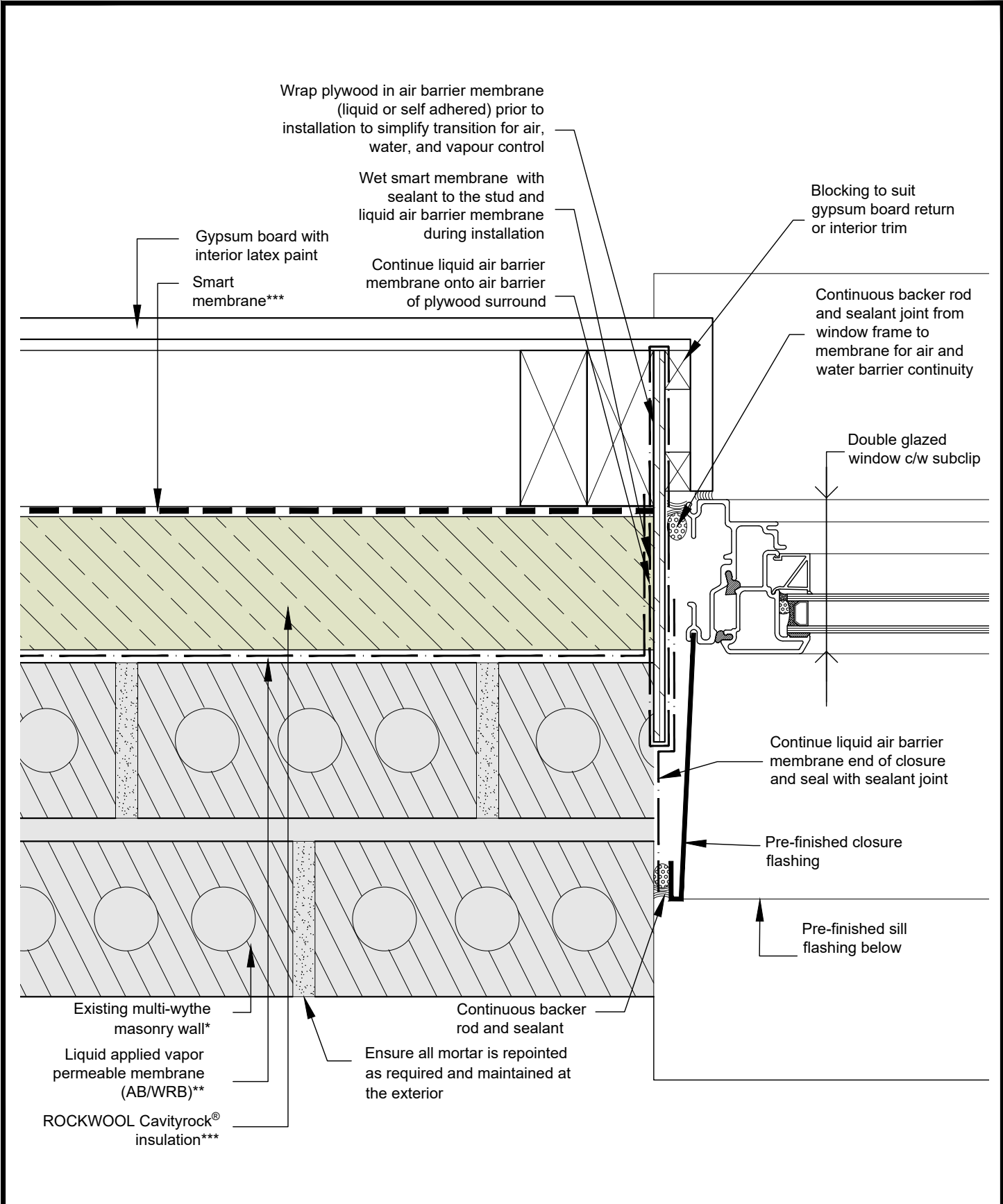
DATE: APRIL 2024

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**EXISTING MASONRY RETROFIT**



DRAWING TITLE:

**TYPICAL PUNCHED WINDOW JAMB PLAN**

DRAWING NO.:

**Detail 06**

SCALE: 3" = 1'-0"

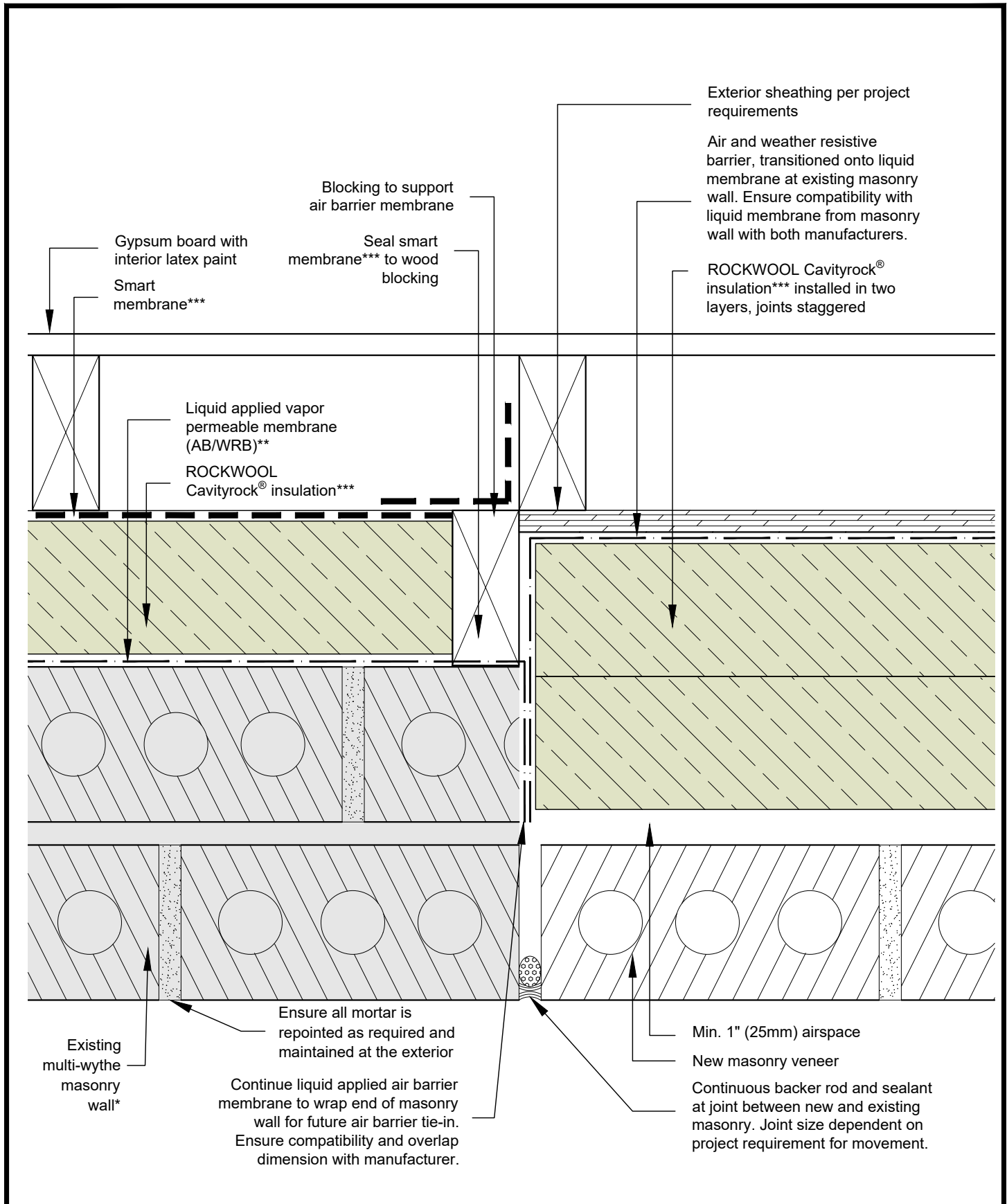
DATE: APRIL 2024

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**EXISTING MASONRY RETROFIT**



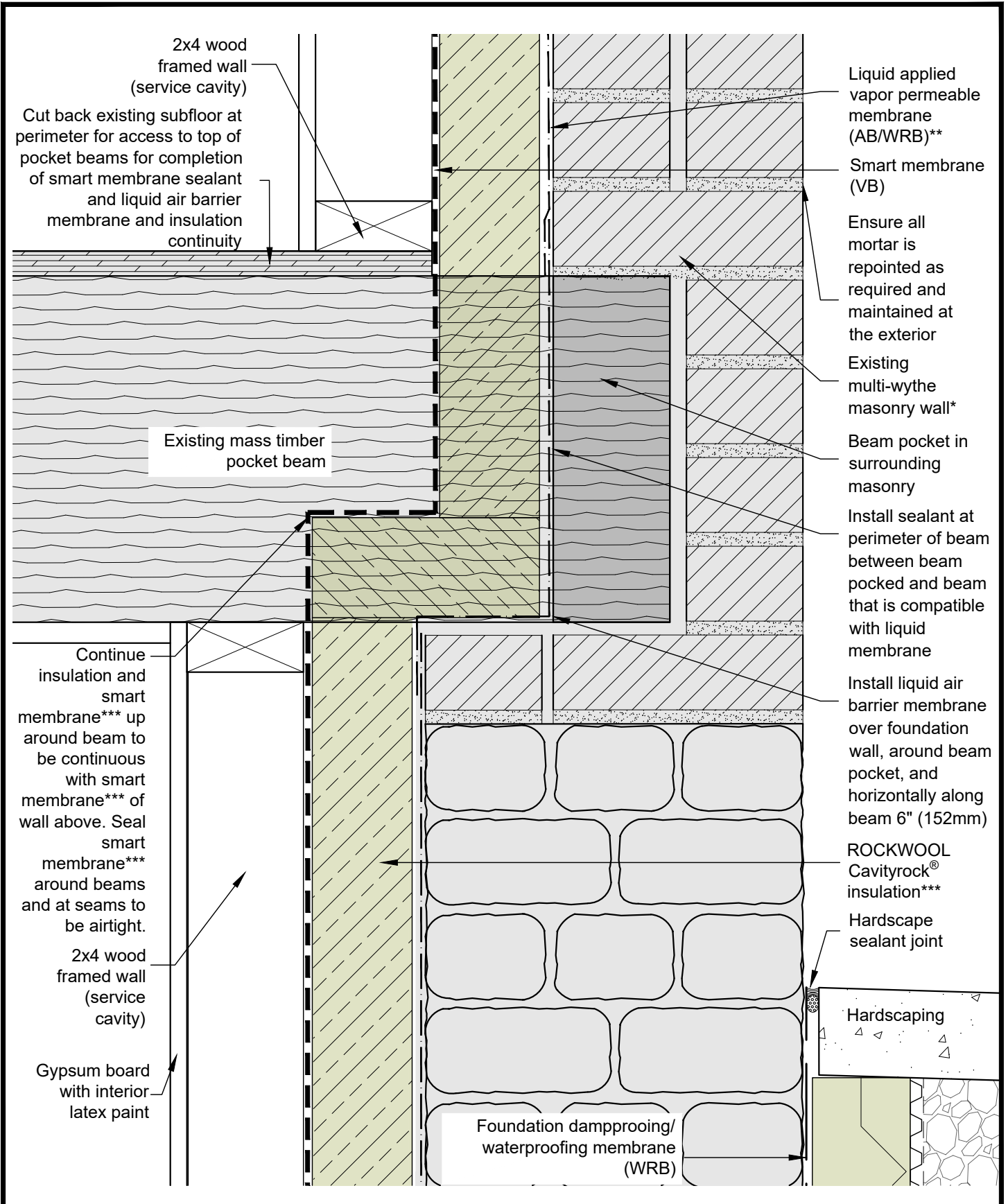
DRAWING TITLE: **PLAN DETAIL: WALL TRANSITION FROM EXISTING TO NEW CONSTRUCTION**

DRAWING NO.: **Detail 07**  
 SCALE: 4" = 1'-0"  
 DATE: APRIL 2024

April 09 2024 5:05 PM

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**EXISTING MASONRY RETROFIT**



DRAWING TITLE:

**TYPICAL BASE OF WALL SECTION AT EXISTING STONE FOUNDATION WALL**

DRAWING NO.:

**Detail 08**

SCALE: 3" = 1'-0"

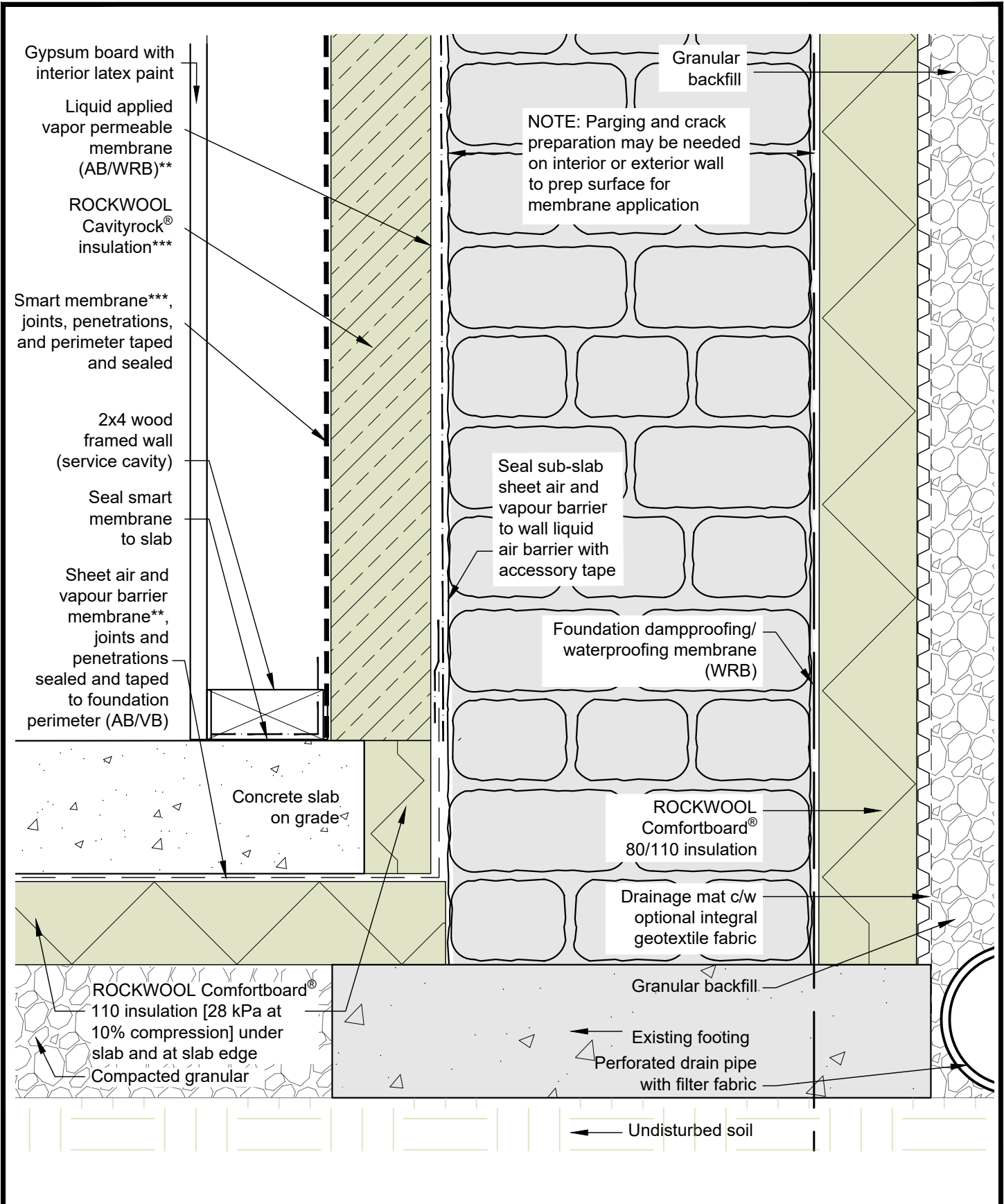
DATE: APRIL 2024

April 09 2024 5:06 PM

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**EXISTING MASONRY RETROFIT**

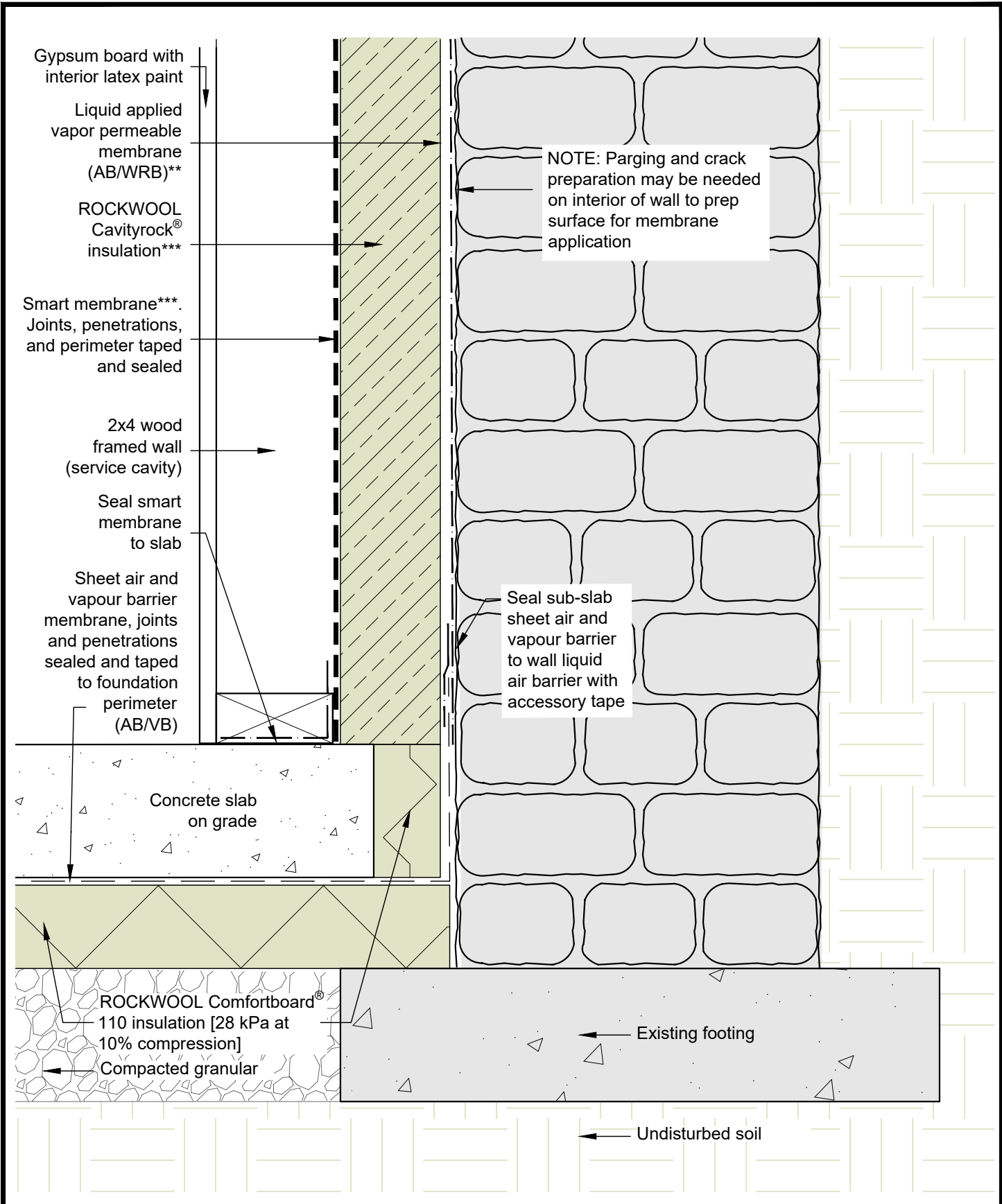


DRAWING TITLE: **TYPICAL BASE OF FOUNDATION WALL AT SLAB-ON-GRADE (EXTERIOR EXCAVATION AND INSULATION)**

DRAWING NO.: Detail 09a  
 SCALE: 3" = 1'-0"  
 DATE: APRIL 2024

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## EXISTING MASONRY RETROFIT



DRAWING TITLE: **TYPICAL BASE OF FOUNDATION WALL AT SLAB-ON-GRADE (INTERIOR RETROFIT ONLY)**

DRAWING NO.: **Detail 09b**  
SCALE: 3" = 1'-0"  
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