KEY CONCEPTS:
The dimensions and material relationships shown in this detail are not to scale and have been exaggerated for clarity. Actual dimensions will vary, and should be carefully coordinated with sequencing and construction tolerances to ensure the long-term durability and performance of this and similar exterior wall details.

Interface conditions between building envelope materials, components and systems should be fully detailed in a manner that is both technically sound and serviceable. Detailing should, at a minimum, allow for coordination of drainage planes when two or more different wall types are used in the same facade; allow for thermal and moisture-induced changes in material properties and differential thermal movement; and allow for in-service deflection, shrinkage, creep and similar behavior considered to be within the allowable structural limits of the project without compromising the weather-tight integrity and thermal performance of the building envelope.

The air barrier can either be formed by an exterior side air barrier or by employing the interior side airtight drywall approach.

The location of or need for a vapor retarder within wall assemblies will vary based upon climate, and can be significantly influenced by the storage capacity and vapor permeance of the materials selected for each layer of the wall system. A climate-specific, hygrothermal analysis for any wall assembly should be considered to further evaluate this concern.

See the General section of the WBDG for additional information and guidance.

ARCHITECTURAL PRECAST ROUND PENETRATION - FLASHING DETAIL

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KEY CONCEPTS:
The dimensions and material relationships shown in this detail are not to scale and have been exaggerated for clarity. Actual dimensions will vary, and should be carefully coordinated with sequencing and construction tolerances to ensure the long-term durability and performance of this and similar exterior wall details.

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ARCHITECTURAL PRECAST
ROUND PENETRATION - EXTERIOR DETAIL

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INSTALL EXPANDING URETHANE FOAM AIR SEAL AROUND PENETRATION. CHECK FIRE RATING AND OTHER APPROPRIATE REQUIREMENTS OF THE BUILDING CODE AND ALSO CHECK WITH THE PIPE/CONDUIT/ETC. (PENETRATION ELEMENT) MANUFACTURER TO ENSURE MATERIAL COMPATIBILITY BETWEEN THE FOAM AND PENETRATION MATERIAL.

KEY CONCEPTS:
The dimensions and material relationships shown in this detail are not to scale and have been exaggerated for clarity. Actual dimensions will vary, and should be carefully coordinated with sequencing and construction tolerances to ensure the long-term durability and performance of this and similar exterior wall details.

Interface conditions between building envelope materials, components and systems should be fully detailed in a manner that is both technically sound and serviceable. Detailing should, at a minimum, allow for coordination of drainage planes when two or more different wall types are used in the same facade; allow for thermal and moisture-induced changes in material properties and differential thermal movement; and allow for in-service deflection, shrinkage, creep and similar behavior considered to be within the allowable structural limits of the project without compromise to the weather-tight integrity and thermal performance of the building envelope.

The air barrier can either be formed by an exterior side air barrier or by employing the interior side airtight drywall approach.

The location of or need for a vapor retarder within wall assemblies will vary based upon climate, and can be significantly influenced by the storage capacity and vapor permeance of the materials selected for each layer of the wall system. A climate-specific, hygrothermal analysis for any wall assembly should be considered to further evaluate this concern.

See the General section of the WBDG for additional information and guidance.

ARCHITECTURAL PRECAST ROUND PENETRATION - INTERIOR DETAIL

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