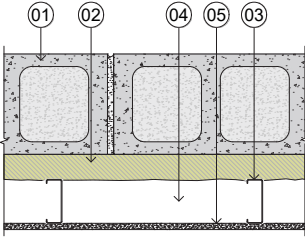
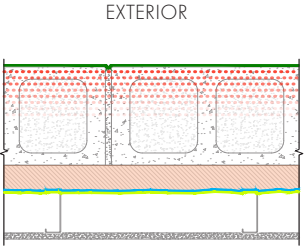
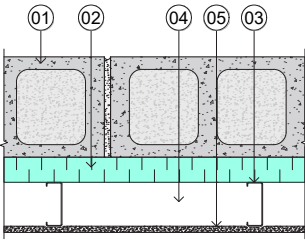
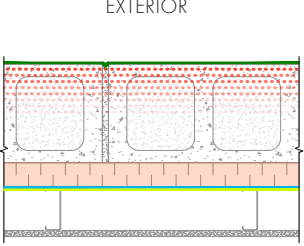


Chapter 7 – Single-Wythe CMU Systems

Table 7-1 Single-wythe CMU wall assembly components and water-shedding surface and control layer summary

Insulation Option	Single-Wythe CMU Wall	Water Shedding-Surface and Control Layers
Closed-Cell Spray Foam Insulation		
Vapor-Impermeable Board Insulation *		
LEGEND	<ol style="list-style-type: none"> 1. Single-wythe CMU wall with water-repellent admixture and surface-applied clear water repellent 2. Continuous insulation 3. Steel stud-framed wall 4. Air cavity w/services (optional) 5. Interior gypsum board <p>* With fully tapered/sealed joints, terminations, and penetrations</p>	<p>— Water-Shedding Surface</p> <p>Control Layers:</p> <ul style="list-style-type: none"> — Water — Air — Vapor — Thermal

options listed in Table 7-1. Elastomeric coatings are further discussed in Chapter 4.

Air Control Layer

The air control layer comprises the air barrier system and is responsible for controlling the flow of air through the building enclosure, either inward or outward. Air flow is significant because it impacts heat flow (space conditioning), water vapor transport, and rain penetration control. Refer to Chapter 3 for a discussion regarding the air control layer and properties of the air barrier system.

For the single-wythe wall system shown in Table 7-1, the air barrier system is either:

- The CCSPF interior of the CMU wall structure.

- XPS insulation when fully taped and/or sealed at all joints, terminations, and penetrations.
- The foil facer of board insulation products when the facer is fully taped and/or sealed at all joints, terminations, and penetrations.

Additional measures that can improve the wall systems air control include:

- A fluid-applied air barrier and WRB membrane where used on the interior face of the CMU wall structure.
- An elastomeric coating where used on the exterior face of the CMU wall structure.