

# Closed-Cell Spray Foam Insulation

*Merrimack High School saved over  
\$940,000 using closed-cell spray foam*

*Photo Credit: Gary Hall Photography*



With superior insulating, air and vapor barrier performance, ccSPF is the ideal choice for exterior masonry (mass) walls.

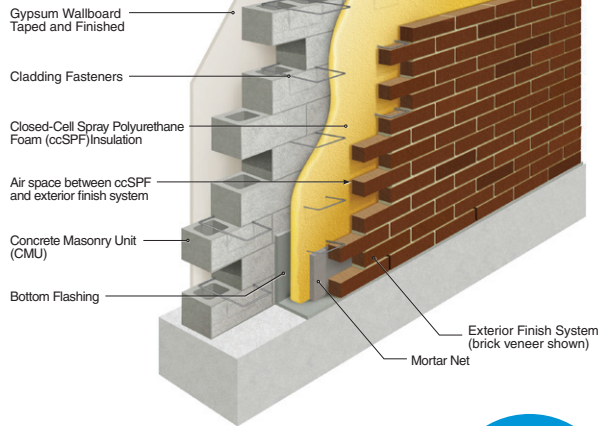
Rigid board insulation such as XPS, EPS, PIR and mineral wool require additional water/air barrier layers and detailing to adequately protect the building, adding complexity and cost. CcSPF can simplify projects and reduce costs.

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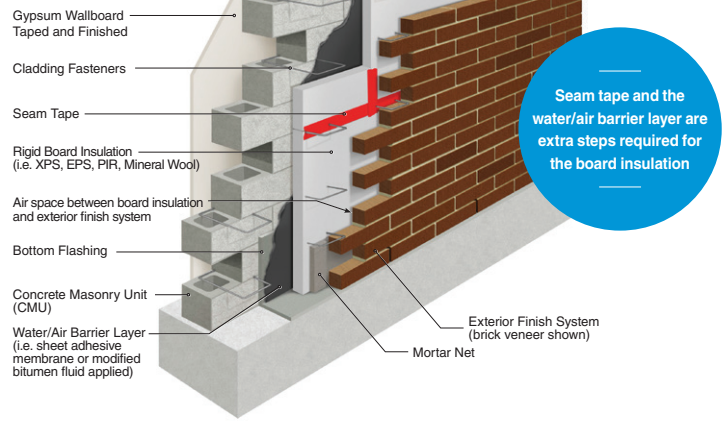
# Fewer Steps. More Savings.

Choosing ccSPF can result in cost savings in excess of 30%<sup>1</sup> relative to board insulation that requires extra steps for air/water control. In addition, you can simplify labor scheduling and shorten installation time — all while delivering superior insulation performance for your customers.

## CcSPF Insulation



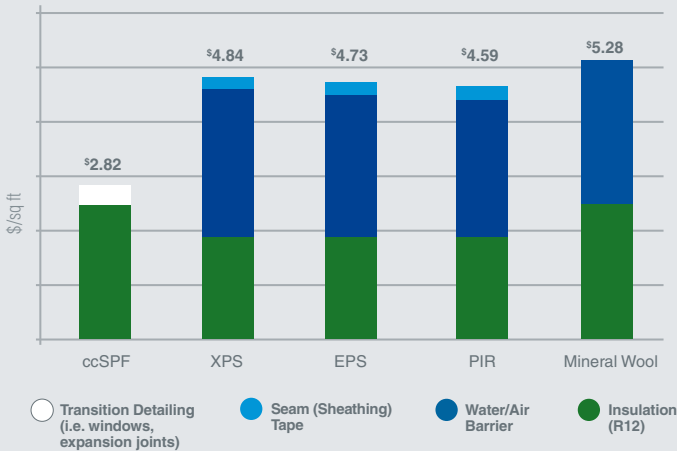
## Rigid Board Insulation



CcSPF reduces costs, wall complexity and trades needed

## The Clear Choice For Savings

Average Cost/sq ft of Insulation System (R-12)



## CcSPF Insulation System Benefits

- Superior thermal performance
- Meets ASHRAE 90.1 and IECC continuous insulation requirements
- Air barrier — helps control air leakage without additional detailing
- Improved moisture/vapor resistance
- The only FEMA-approved flood damage-resistant insulation<sup>2</sup>
- Simplified wall design (fewer trades needed)

## Mass Wall ccSPF System Excels at High School

A ccSPF mass wall system was used for the 138,000-square-foot renovation and expansion of Merrimack High School in Penacook, NH. The system's superior air tightness and thermal performance facilitated a 25% reduction in HVAC sizing at a significant project cost savings of \$6.85 per sq ft (total project savings exceeded \$940,000). After a year, the school was using half the anticipated fuel, delivering additional savings throughout the building's remaining life.<sup>3</sup>

For more information on saving time and money with ccSPF formulated with ultra-low-GWP Solstice® Liquid Blowing Agent, visit [honeywell-blowingagents.com](http://honeywell-blowingagents.com).

1. Based on national averages determined using RSMMeans database for each material at a nominal thickness required to achieve a thermal performance of R-12. Because building code requirements can differ by region, potential material/labor costs and associated savings can vary. It is important to follow building codes and standards for your respective region. 2 FEMA technical bulletin 2-08 (replaces 2-93) Flood Damage-Resistant Materials requirements (Aug 2008) www.fema.gov. 3 Determined by Barwell Architects and GWR Engineering project assessment. \$6.85/sq ft is the difference between HVAC savings minus insulation package costs. Project total was 138,000 sq ft (addition + renovation) resulting in total project savings of approx. \$946,000. Insulation System Cost References (based on RS Means national averages): A) Transition detailing: Window flashing and expansion joint detailing for ccSPF (\$0.43). B) Seam (sheathing) tape: Tape to seal joints between insulation boards: (\$0.21). C) Water/Air barrier: Average cost for sheet adhesive membrane (\$2.91) or modified bitumen fluid applied (\$2.60) waterproofing systems. (\$2.91+\$2.60/2=\$2.76). Sheet adhesive membrane is defined as PE/PVC sheet + bitumen adhesive backing. D) Insulation costs: For min. R-12 (installed cost): i. ccSPF 2" (R12.5) -\$2.39. ii. XPS 2.5" (R12.5) -\$1.87. iii. EPS 3" (R12) -\$1.76. iv. PIR 2" (R12.5) -\$1.62. v. Mineral (rock) wool 3" (R12) -\$2.52

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