



VSH-RATED ROOF SYSTEMS

SBS-MODIFIED BITUMEN & SENTINEL PVC

WHAT IS VERY SEVERE HAIL?

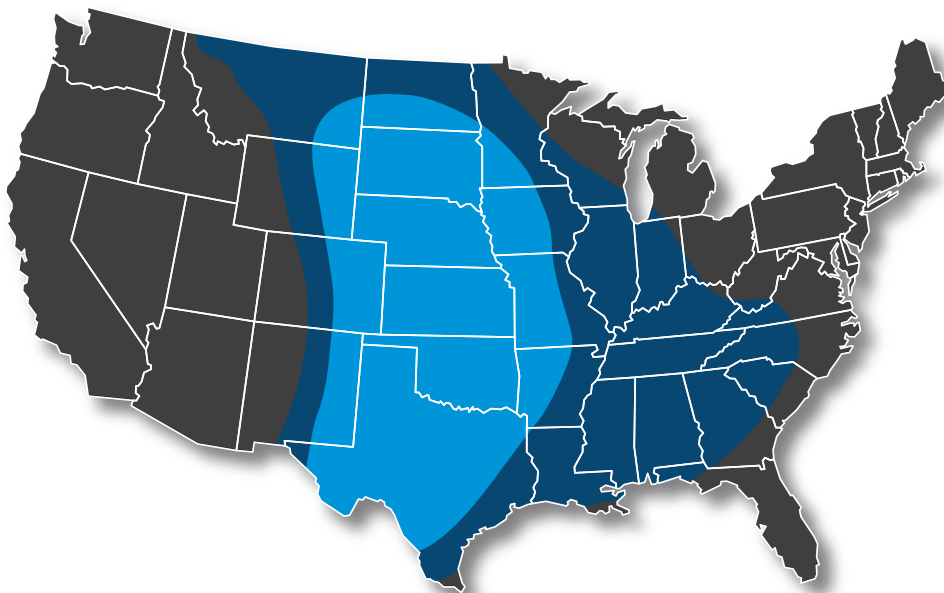
When it comes to the protection of your building, your roof is your first line of defense against severe weather. There are few weather events more devastating to a roofing system than hail. In recent years, these weather events have become more and more frequent and severe. FM Global, one of the country's most prominent property insurance companies, specializes in loss prevention utilizing engineering rigorous testing to mitigate risks. FM Global has designated hail zones in the U.S., classifying each zone based on the size of the hail.

EXCEPTIONAL PERFORMANCE

These zones are used when designing, specifying, and constructing roof systems to ensure they meet the criteria to withstand impacts from the designated hail size. The geographic areas have increased year-over-year according to FM Global. Roof systems need to be designed and installed with resilience in mind.

DID YOU KNOW?

The largest hailstone recorded in the United States was documented in South Dakota in 2010. The hailstone measured 8" in diameter, over 18.5" in circumference and weighed almost two pounds! That's the size of a volleyball!



MODERATE HAIL
Up to 1 3/4"



SEVERE HAIL
Up to 2"



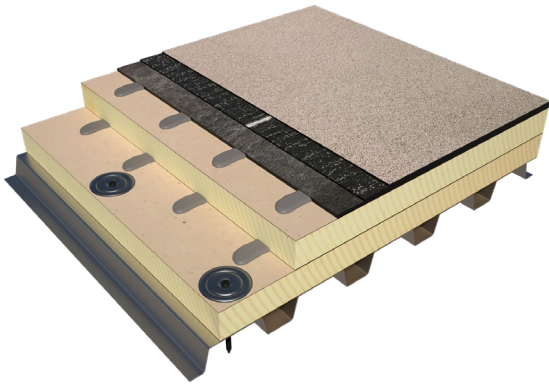
VERY SEVERE HAIL
Greater than 2"

VSH RATED ROOF ASSEMBLIES

SOPREMA LEADS THE INDUSTRY IN VSH ASSEMBLIES

When it comes to Very Severe Hail (VSH) rated roof assemblies, SOPREMA outperforms the competition. SOPREMA currently holds approximately 3,134 VSH-rated Roof NAV assemblies listed with FM Global for SBS roof system assemblies, along with 132 for SENTINEL PVC assemblies. These assemblies undergo the most stringent testing in order to obtain VSH approval and are a testament to the proven resilience and durability of our roof systems.

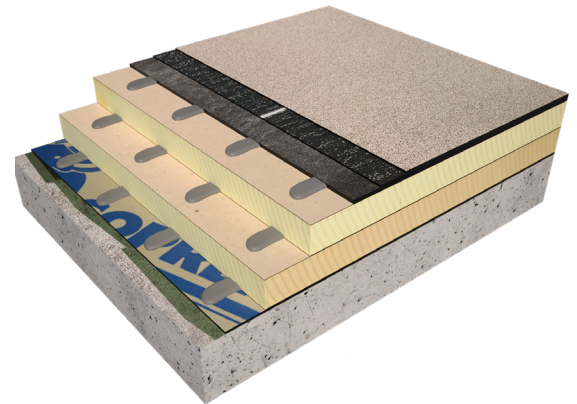
VSH STEEL DECK ASSEMBLY (SBS-MODIFIED BITUMEN)



Class 1-90	Roof NAV #453945-453860-0
Deck	Steel
Insulation	2" SOPRA-ISO (mechanically fastened)
Insulation	2" SOPRA-ISO adhered with DUOTACK 365
Coverboard	¼" SOPRABOARD adhered with DUOTACK 365
Base Ply	SOPRALENE FLAM 180 (heat welded)
Cap Sheet	SOPRALENE FLAM 180 FR GR WH (heat welded)

VSH CONCRETE DECK ASSEMBLY (SBS-MODIFIED BITUMEN)

Class 1-480	Roof NAV #453953-453860-0
Deck	Concrete
Primer	ELASTOCOL STICK
Vapor Retarder	SOPRAVAP'r (self-adhered)
Insulation	2" SOPRA-ISO adhered with DUOTACK 365 (two layers)
Coverboard	¼" SOPRABOARD adhered with DUOTACK 365
Base Ply	SOPRALENE FLAM 180 (heat welded)
Cap Sheet	SOPRALENE FLAM 180 FR GR WH (heat welded)



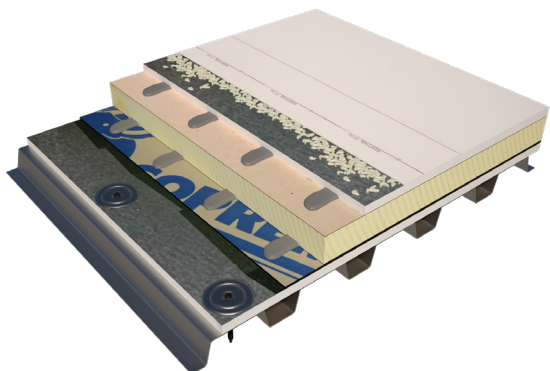
DID YOU KNOW?

The costliest hailstorm in U.S. history occurred in 2001 and spanned over three states. Hitting Kansas, Missouri and Illinois, the storm produced baseball-sized hail and caused over \$2 billion in damages.



VSH RATED ROOF ASSEMBLIES

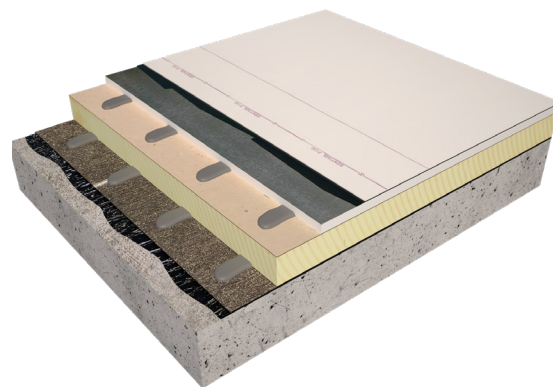
VSH STEEL DECK ASSEMBLY (SENTINEL PVC)



Class 1-165	Roof NAV #541394-0-0
Deck	Steel
Thermal Barrier	5/8" DensDeck StormX Prime Roofboard (mechanically fastened)
Primer	ELASTOCOL STICK
Vapor Retarder	SOPRAVAP'r (self-adhered)
Insulation	2" SOPRA-ISO adhered with DUOTACK 365
Coverboard	5/8" DensDeck StormX Prime Roofboard adhered with DUOTACK 365
Membrane	SENTINEL P150 HFB adhered with DUOTACK SPF HFO (spatter)

VSH CONCRETE DECK ASSEMBLY (SENTINEL PVC)

Class 1-540	Roof NAV #536042-0-0
Deck	Concrete
Vapor Retarder	SOPRALENE 180 SANDED adhered with COLPLY EF adhesive
Insulation	2" SOPRA-ISO adhered with DUOTACK 365
Coverboard	5/8" DensDeck StormX Prime Roofboard adhered with DUOTACK 365
Membrane	SENTINEL P150 adhered with SENTINEL S Bonding Adhesive



DID YOU KNOW?

Hailstones can fall at speeds between 9 mph (14 km/h) and 110 mph (177 km/h) – the larger hailstones are, the faster they fall. Large hail sometimes precedes a tornado, since the conditions needed to produce both events are similar.

