

# 5 WAYS COVER BOARDS SAVE YOUR ROOF



To extend the life of the roof, the National Roofing Contractors Association recommends including a noncombustible cover board on all roof assemblies that use single-ply membranes. Including a cover board has quickly become the new standard—and with good reason. Learning five ways cover boards mitigate risk from potential sources of roof damage, will also help you mitigate the temptation to value engineer them out of your roof assemblies.



## 1 FIRE RESISTANCE

Cover boards play a key role as a barrier to help the roof resist external fire. Cover boards containing gypsum provide enhanced fire resistance to protect the roof assembly, due to the material's chemical composition. Gypsum contains 21% chemically combined water, which releases when exposed to fire, inhibiting the burning process. To put that into perspective, a 20,000 square foot roof covered with 5/8" 4'x8' fiberglass mat gypsum roof board contains roughly 1,250 gallons of crystal water.



## 2 PUNCTURE RESISTANCE

Supporting the weight of photovoltaic equipment for solar energy, the gardens of green roofs, or the water storage of blue roofs, a cover board provides necessary protection for the membrane and roof assembly from the impact of equipment weight and the increased foot traffic for its maintenance. Thermoplastic membranes tested in assemblies with 1/4" DensDeck® Prime Roof Board panels underneath were 25-40% more puncture-resistant than 1/2" HD ISO and 50-70% more than with no cover board at all.<sup>1</sup>



## 3 INSULATION PRESERVATION

Typically the most expensive component in a commercial roof assembly, polyiso insulation boards are also the most critical component in achieving the roof's target R-value (temperature moderation) and efficient energy use for internal climate control. Cover boards work as the insulation's protector, mitigating the risk of foot traffic or adverse weather conditions damaging the polyiso and preventing costly frequent insulation replacement and repairs. In addition, it helps reduce the escape of heat in cold weather, and cool air in warm weather.



## 4 WIND UPLIFT PROTECTION

A rigid cover board is one of the most effective ways to mitigate the risk of damage from strong winds flying away with pieces of your roof. Thunderstorms, hurricanes, tornadoes and blizzards carry strong winds creating potentially damaging uplift pressure. Strength is a key metric of the board's ability to withstand the forces of wind and help preserve the integrity of the building to prevent potential future storm-related repairs.



## 5 OVERALL COST SAVINGS

True durability in a roofing system translates directly into lower total cost of ownership. By extending the lifecycle of the roof, the cover board saves exponentially on the money, time, and aggravation that comes with repairing a damaged roof. More than just toughness, the cover board's durability extends the life of the roof by maintaining strength against the dangers listed above and mitigating the need for costly repairs or premature re-roofing.