



offers drivers both a rugged military heritage and consumer-friendly comfort.

Emphasis is on utility at HUMMER H2 ASSEMBLY PLANT

SUVs. Sport Utility Vehicles. A name almost synonymous with rugged, at least in its infancy. Yet soon, even what is arguably the most rugged of them all — the military HUMVEE™ and its civilian counterpart, the HUMMER™ H1 — will have a softer side. The new consumer-friendly HUMMER H2 will combine combat-bred toughness with enough cozy amenities to make it feel comfortably at home in suburbia.

The dual personality of the H2 will actually mirror its new manufacturing environment: a careful juxtaposition of demanding, military-like quality standards with thoughtful design elements intended to create a more pleasant work experience. And one of the tools that helped make that setting possible was White PSK Duct Wrap from Knauf.

The white PSK facing on Knauf's Duct Wrap with KwikStretch™ markings enabled the insulation team to provide both performance and aesthetic benefits for AM General's plant. The team (right) included (l. to r.): Dan Hoffman, Knauf; John Eiler, Diversified Insulation Distributors; Brian Willett and J.R. Schuler, Gribbins Insulation.

Creating

A PRODUCTIVE ENVIRONMENT

Even the smallest details of AM General's imposing new 630,000-square-foot (58,527 m²) plant near South Bend, Indiana, hint of its military heritage. From precisely monitored plant-wide air pressurization systems to pre-engineered blowout panels and spark-arresting fixtures in the paint mixing room, the very walls of the facility seem to be inscribed with a rigorous code of safety and quality standards.

Yet the comfortable ambience the company has created for its workers paints a stark contrast. And that was clearly the intent of Albert Kahn Associates, the architectural engineering firm that designed the plant. "For the person who works here every day, it's important for the plant to look nice," says Rick Bernard, mechanical/ electrical coordinator for Kahn. "If the workers are not happy with their environment, then the product that goes out the back door is going to reflect that. If you've got something that looks large and airy and clean, the attitude is completely different."



Combining

BEAUTY AND PERFORMANCE

For Kahn, that perspective extended even to duct insulation: Knauf Duct Wrap with white PSK (polyscrim-kraft) facing was selected instead of a more conventional silver foil-faced product. "It looks clean and bright, and we don't have to paint it to get a nice, shiny finished look," Bernard adds. "That saves our contractors time, and you can see the difference it makes in the atmosphere it projects throughout the plant."

About 120,000 square feet (11,148 m²) of 2"(51mm) Knauf Duct Wrap was used on dual-service supply ducts in the plant's HVAC system, which includes in-line gas burners for heating and three screwtype chillers that supply 44°F (7°C) chilled water for cooling. Seventeen

air handling units with an average capacity of 60,000 CFM (1699 m³/minute) each distribute conditioned air.

One of the most important roles for the insulation was preventing condensation on ducts during cooling operation (55°F/13°C supply air temperature) – a daunting task, given the use of 100 percent fresh air during humid Indiana summers. "Preventing condensation is critical, especially in the paint mixing areas," says Bernard, "because water and paint obviously don't mix real well. And of course, condensation doesn't look good, either." One of the advantages that Knauf's PSK facing provided over traditional white vinyl - an alternative facing that was considered - was a significantly lower moisture vapor transmission rating, to help prevent water vapor from migrating toward the cold ducts.



chillers. KwikStretch markings on the duct wrap helped installers make faster measurements.

Kahn selected
Knauf's white PSKfaced Duct Wrap both
for its durability and
for the contribution a
bright, glossy white
finish could make to
the overall atmosphere in the plant.



Technical Support (800) 825-4434, ext. 8212

Customer Service

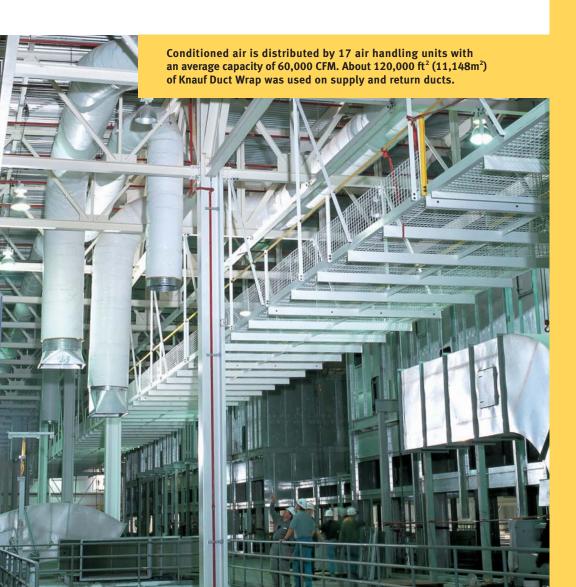
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Standing up

TO ABUSE

Another challenge the duct insulation had to overcome was abuse on the job site. "Unfortunately, construction workers tend to think of ductwork as a walkway, so when they go back to fix or install something, the insulation gets ripped up," notes Bernard. "So the tougher the insulation, the less rework that has to be done. This system has been working very nicely; I've yet to see any of it come undone or lift up. I'm very impressed with it."

The insulation contractor, Gribbins Insulation of Evansville, Indiana, completed the Hummer plant job in about four months, with just four crew members on the job site. "This was the first time we used the PSK product, but it worked out really well," says Brian Willet, project manager for Gribbins. "Our installers liked it, and it solved a design challenge for the engineers. So it turned out to be a good solution all around."



Knauf Fiber Glass GmbH

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Knauf has regional offices throughout the U.S. and Canada. For the number of the nearest office, call (800) 825-4434.

PROJECT PROFILE

- Facility: HUMMER H2 Assembly Plant
- Size: 630,000 sq. ft.
- Owner: AM General Corporation
- Architect/Engineer:
 Albert Kahn Associates
 Detroit, Michigan
- Mechanical Contractor: Apex Industries Indianapolis, Indiana
- Insulation Contractor: Gribbins Insulation Evansville, Indiana
- Insulation Distributor: Diversified Insulation Distributors Indianapolis, Indiana
- Knauf Products: PSK Duct Wrap with KwikStretch™ markings

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