

*Duct
Fire Protection
Case
History*

Hollywood Station Residences Phase 1



PROBLEM

Space constraints between ducts and dry-walled walls

Time constraints due to need to meet occupancy date

SOLUTION

FireMaster® FastWrap®+ flexible duct wrap from Thermal Ceramics and an approved silicone fire stop sealant

TYPE OF DUCTS

Primary air ducts
Smoke control ducts
Elevator vents

KEY PROJECT PARTICIPANTS

Developer

Cornerstone Premier Communities
Coral Gables, FL

Project Architect

Kobi Karp Architecture
Miami, FL

General Contractor

Alliance Construction
Coral Gables, FL

Mechanical Contractor

Eagle Mechanical
Miami, FL

Insulation Contractor

Insulation Solutions
Miramar, Florida

Easily installed, flexible duct wrap system saves contractor space and time at Hollywood Station Residences

Hollywood Station is a multiphase, mixed-use condominium community that is pioneering urban growth on the west side of the train tracks in downtown Hollywood, Florida. When complete, it will span almost eight acres, across four city blocks, and will encompass a total of 600 condo units, town homes and lofts in three phases, as well as 15,000 square feet of retail space.

The newly completed Phase 1 of Hollywood Station offers 214 condos and town home residences. This 10-story contemporary-style building utilizes an innovative system for the fire protection of its primary air, smoke exhaust, and elevator vertical ventilation ducts. The ventilation risers were originally designed to be enclosed in conventional 2-hour rated drywall enclosures. Drywall chase enclosures take up substantial building space - amounting to at least four times the actual volume of the duct and can be labor-intensive, particularly in buildings with multiple floors or complex runs.

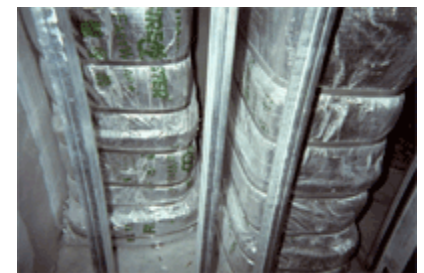


Primary air duct on left and smoke control duct on right.

Because of tight space issues between the primary air and smoke control ducts and the walls, the general contractor, Alliance Construction, called in Mike Estrada, President of Insulation Solutions, and Thermal Ceramics Inc. for a solution to their problem. In addition to the space constraints, the contractor was faced with strict time constraints due to the need to be ready by the projected occupancy date.

As an alternative to the fire-rated drywall chase enclosure, Thermal Ceramics' solution to the problem consisted of wrapping the metal ducts directly with FireMaster FastWrap+ fully-encapsulated duct wrap along with silicone fire stop sealant for through-penetrations. This compact design allowed for zero clearance to combustibles and solved the existing tight space issue.

Thermal Ceramics supplied the mechanical engineer and the City of Hollywood, FL with the necessary documentation to satisfy their strict code requirements for duct fire protection. These included the ICC-ES 9424E report, UL Listing V-19, UL testing per ISO 6944 protocol, and damper testing performed by Thermal Ceramics at UL Canada's laboratory. Most of the slab penetrations were handled by following UL System C-AJ-7021 criteria and the drywall fire stopping was satisfied by following UL System W-J-7086 criteria.



The same ducts fire protected with FastWrap+, allowing for zero clearance to combustibles.

The Thermal Ceramics FireMaster FastWrap+ product was installed by Insulation Solutions, a trained and qualified insulation contractor. Due to the flexible and lightweight nature of the FastWrap+ product, the entire installation was completed in only five weeks. The easy installation and the compact nature of the FastWrap+ system enabled the contractor to meet his deadline without having to possibly move ducts or walls and provided excellent, code approved protection against fire.

FIREMASTER® DUCT WRAP FIRE PROTECTION PRODUCTS



Zero clearance to combustibles



Rigid Shaft Alternative



2 Hr. ASTM E119, E814 & E2336

Other applications for FireMaster flexible duct wrap products include:

- Commercial Kitchen Grease Ducts
- Clothes Dryer Exhaust Ducts
- Chemical Exhaust Ducts
- Hazardous Exhaust Duct
- Stair Pressurization Ducts

FOR MORE INFORMATION

For more information on Thermal Ceramics duct wrap products and applications, please visit Thermal Ceramics on-line at www.thermalceramics.com or www.sweets.com or contact us via e-mail at firemaster@thermalceramics.com.

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Hollywood Station
 Hollywood, FL

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