

Pro-R Rectangle is a strong, pre-assembled, lightweight and high-performance solution for all exterior and interior insulated ductwork applications. The patented Pro-R Rectangle duct system greatly reduces air leakage rates, provides superior thermal performance and eliminates maintenance related insulation repairs, while also reducing installation time and related construction costs due to its weight being much less than conventional ductwork. The aluminum FSK liner applied to the closed-cell phenolic panels allows for an all-in-one SMACNA approved duct and insulation solution.

Project Information

Date:

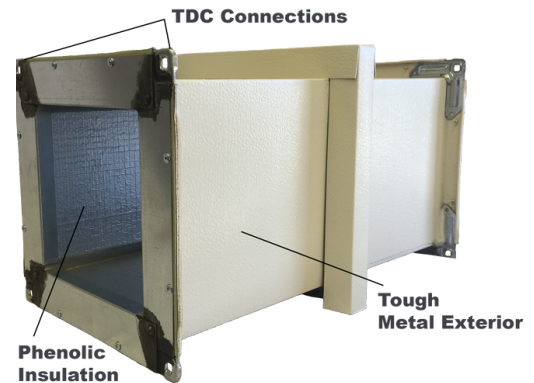
Project:

Engineer:

Purchaser:

Location:

Product Approved By: (Name/Date):



Static Pressure: W.C.

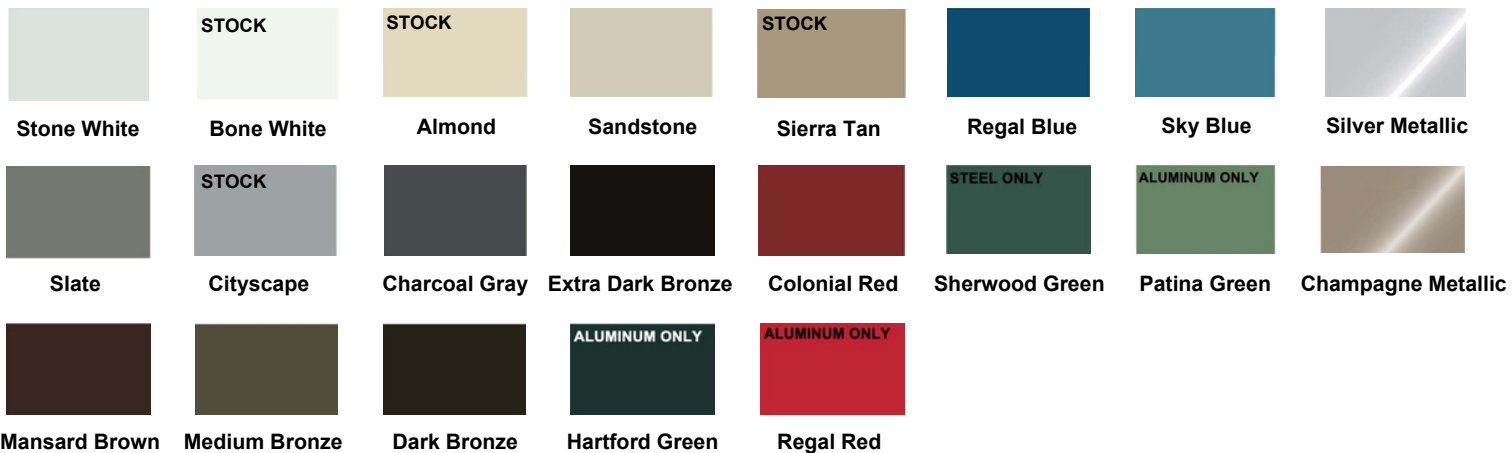
R-Value: R-6 R-8.1 R-12 R-16.6 R-19.3 R-21.4 R-25.3

External Cladding Material Selection: Color Clad Embossed Aluminum Other Metal Cladding Selection: _____

Exterior Cladding Color Selection: Bone White Almond Sierra Tan Cityscape Gray

Other Non-Stock Color* _____

*Non-Stock Colors are Additional Cost



Ducts and Cleats, 200 Plato Blvd W., St Paul, MN 55107
651-265-0605 www.prproduct.com

Pro-R Rectangle Duct:

- Pre-Assembled Duct and Fittings with Multiple Color Options
- Metal Type Options
- High Impact Resistance
- Double Gasket Connection
- Low Thermal Expansion
- Outdoor TDC Flange Cover
- Manufactured to SMACNA Standards
- Integrated TDC Connections
- Weight of 0.89 - 1.59 Lbs. Per Sq. Ft Depending on R-Value

Pro-R Rectangle Compliance:

- Better than SMACNA Class 3 Air Leakage @ 2" w.c.
- SMACNA Seal Class A
- Can be Designed Static Pressure from -10" to 10" w.c.
- ISO 9001 Consistent Quality and Performance

Additional Metal Type Options:

- Embossed Color Clad Steel
- Stainless Steel

Pro-R Rectangle Internal Insulation:

- UL181 / UL723 Kingspan KoolDuct
- High R-values and Combinations
- Can Contribute to LEED Point(s) from the USGBC
- Zero Fiber, Closed-Cell Phenolic Foam with Autohesively Bonded Aluminum Foil
- Duct Wall Nominal Thickness Per R-Value:

R-6.0: 1 1/4"	R-19.3: 3 1/4"
R-8.1: 1 1/2"	R-21.4: 3 1/2"
R-12: 2"	R-25.3: 4"
R-16.6: 2 3/4"	



Exterior Pro-R Embossed Aluminum:

- Standards: ASTM B209
- Standard Cladding: Embossed Aluminum (0.040")
- Compliance: Kynar 500 AAMA 621-02, E-84
- Aluminum Recycled Content: 3105 Alloy 51.1%
- Post Industrial 0.4% Post Consumer

Frictional Properties:

Factory-assembled Pro-R Rectangle utilizes a smooth aluminum inner liner that has frictional characteristics much like galvanized sheet metal, and therefore frictional pressure drop data for galvanized sheet metal ductwork can be applied when designing and specifying Pro-R Rectangle.

Operating Properties:

- Air Velocity Maximum: 5000 FPM
- Temperature Internal; Continuous -15 to 185F
- Size Limitations: None
- Closed-Cell Content > 90%
- Thermal Conductivity (k-value / R-value) at 50-74°F / 10-23°C Mean (ASTM C 518) 0.146 Btu.in/ft².hr.°F / 0.021 W/m.K Thermal Resistance (Material R-value: 7/8": 6.0 ft².hr.°F/Btu 22 mm: 1.047 m².K/W

Health & Safety:

Kingspan phenolic panels have a fiber-free insulation core and are odorless, non-tainting, non-deleterious, and chemically inert and safe to use.