

# KOOLDUCT®

## HIGH PERFORMANCE INSULATED DUCT WORK

### Description

The Knauf KoolDuct® System is a pre-insulated, high performance air duct system for industrial and high-end commercial applications. The system uses a CFC-free phenolic foam board faced on both sides with reinforced foil. Patented, specially engineered, aluminum flanges are designed to connect the duct sections to assure a strong, tight closure. The Knauf KoolDuct System offers significant advantages over sheet metal ductwork. Weight, space, installation time, installed costs, air leakage and energy performance are just a few of these benefits. It is a complete system which includes:

- Complete line of components and accessories for the fabrication and installation of ductwork systems
- Professional hand tools and automatic machinery to facilitate the fabrication of ductwork on a small, medium and large scale
- Custom training program
- Cost estimation software.

### Application

The Knauf KoolDuct System is used in commercial, residential and industrial applications. The ducting is versatile and can be installed internally or externally, and concealed above a false ceiling or visibly mounted. It is easily modified and repaired and can be fabricated on-site with non-powered tools.

### Features and Benefits

- The Knauf KoolDuct System offers a significant installed cost savings over other alternative insulated sheet metal systems, depending on the size of the ductwork and complexity of the project.

- The Knauf KoolDuct System offers many advantages over traditional sheet metal systems, resolving design issues such as weight, space, installation time and energy performance.
- All authorized contractors attend a specialized training program to ensure that uniform quality standards are maintained.
- All ductwork fabrication materials are supplied by Knauf Insulation, ensuring the highest quality and consistency in your ductwork project.
- The Knauf KoolDuct System is ideal for jobs where a non-fibrous solution is desired. The air stream in the sealed duct flows only on aluminum, making it ideally suited for high specification applications.
- The patented jointing system combined with the fully sealed duct seams produce a system that is virtually airtight and leak-free.
- Knauf KoolDuct Systems yield significant savings in reduced heating and cooling loads due to the superior insulating properties of the phenolic panel and minimal air leakage of the jointing system.
- Knauf KoolDuct Systems can be installed flush to the slab, saving valuable space above a suspended ceiling.
- The aluminum grip flanges of the jointing system enables quick connection to components such as fire dampers, VCDs, attenuators and conventional sheet metal ductwork.

### Specification Compliance

#### In U.S. and Canada:

- UL (C-UL) 181, Class 1 system
- SMACNA leakage, Class 6
- DW144, Class B leakage
- NFPA 255

### Technical Data

#### Surface Burning Characteristics

- UL (C-UL) Classified.
- Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84.

#### Thermal Resistance

- R-6.7 at 7/8" (1.2 R.S.I. @ 22 mm)
- R-8.5 at 1 3/32" (1.5 R.S.I. @ 28 mm)

#### Thermal Conductivity (both panels)

- 0.13 BTU in/hr<sup>2</sup>F @ 75°F  
(0.018 W/mC @ 10°C)

#### Service Temperature

- 158°F (70°C)

#### Maximum Air Velocity

- 5000 fpm (25m/s)

#### Internal Static Pressure

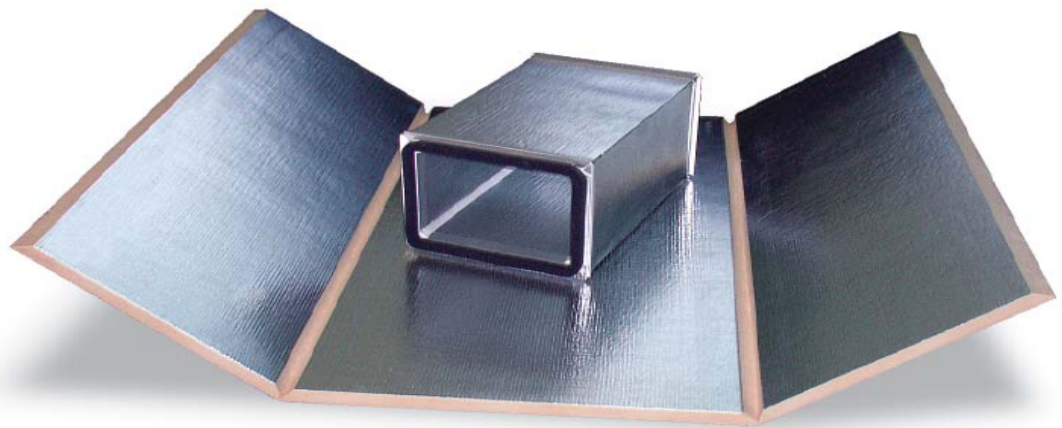
- 4" w.g. (1000 Pa) Positive  
(UL rating: 15" w.g. positive,  
4.5" w.g. negative)

#### Sound Attenuation

- Weighted SRI: 17dB

#### Microbial Growth

- UL 181 tested.
- Does not promote or support the growth of mold, fungi or bacteria.



FOR MORE INFORMATION ON KOOLDUCT® OR ANY OTHER INSULATION NEED PLEASE CONTACT

# COUNTY GROUP COMPANIES

## 1-800-326-8946