

SUBMITTAL RECORD _____
 JOB _____
 LOCATION _____
 SUBMITTED TO _____
 SUBMITTAL PREPARED BY _____
 APPROVED BY _____
 DATE _____



Submittal Form Neoprene Gasket



DESCRIPTION

Wherever flanges are used in connecting parts of a duct system, the potential for air leakage exists. Besides contributing to energy waste, leaks can also create noise. Sealing of ductwork can be accomplished with the use of neoprene gasket which adheres to flanged surfaces. When this material is attached to a flange which is then assembled to a second flange, the material is compressed and fills gaps and irregularities creating a seal.

FEATURES

- Excellent resistance to oil and fuel
- Black, continuous, closed cell, medium density rubber product
- PVC/NBR/CR closed cell rubber material manufactured in continuous rolls

MEETS

- UL94 5VA, 5VB, V-0, V-1, HF-1 and HBF listed for flame
- ASTM D 1056-07 2A2/2C2/2B2 grade product
- ASTM D 6575-07 Type II, Grades A & B, Condition Soft-Medium material

TYPICAL PROPERTIES

Color: Black
Density: 88-120 kg/m³
Hardness: 50 + 10
Compression-Deflection @ 25%: 5 - 9 psi
Compression Set @ 50%: ≤ 25%
Water Absorption: < 10%
Fluid Immersion: < 100%
Tear Strength: 12 lbs./in.
Tensile Strength: 75 psi min.
Elongation: 100% min.
Flammability: FM VSS 302
 UL 94 V-0, 5 VA, HF-1, HBF
Temperature Use: -20°F - 160°F Max (200°F intermittent)

NEOPRENE			
ITEM#	CODE	DESCRIPTION	LENGTH
8129	BN 1812	1/8" x 1/2"	50'/RL
8130	BN 1434	1/4" x 3/4"	50'/RL
8131	BN 3834	3/8" x 3/4"	25'/RL
8261	BN 31634	3/16" x 3/4"	50'/RL
8151	BN 51634	5/16" x 3/4"	50'/RL
8149	BN3161	3/16" x 1"	50'/RL
6303	BN142	1/4" x 2"	50'/RL

SUGGESTED SPECIFICATIONS

All flanged joints shall be sealed with gasketing, coded _____ as supplied by Duro Dyne Corporation.

RELATED SMACNA RECOMMENDATIONS*

1.4.1 - Duct Sealing

Ducts must be sufficiently airtight to ensure economical and quiet performance of the system. It must be recognized that airtightness in ducts cannot, and need not, be absolute (as it must be in a water piping system). Codes normally require that ducts be reasonably airtight. Concerns for energy conservation, humidity control, space temperature control, room air movement, ventilation, maintenance, etc., necessitate regulating leakage by prescriptive measures in construction standards. Leakage is largely a function of static pressure and the amount of leakage in a system is significantly related to system size. Adequate airtightness can normally be ensured by a) selecting a static pressure, construction class suitable for the operating condition, and b) sealing the ductwork properly.

The designer is responsible for determining the pressure class or classes required for duct construction and for evaluating the amount of sealing necessary to achieve system performance objectives. It is recommended that all duct constructed for the 1 in. (250 Pa) and 1/2 in. (125 Pa) pressure class meet Seal Class C. However, because designers sometimes deem leakage in unsealed ducts not to have adverse effects, the sealing of all ducts in the 1 in. (250 Pa) and 1/2 in. (125 Pa) pressure class is not required by this construction manual. Designers occasionally exempt the following from sealing requirements: small systems, residential occupancies, ducts located directly in the zones they serve, ducts that have short runs from volume control boxes to diffusers, certain return air ceiling plenum applications, etc. When Seal Class C is to apply to all 1 in. (250 Pa) and 1/2 in. (125 Pa) pressure class duct, the designer must require this in the project specification. The designer should review the *HVAC Air Duct Leakage Test Manual* for estimated and practical leakage allowances.

Seven pressure classes exist [1/2 in. (125 Pa), 1 in. (250 Pa), 2 in. (500 Pa), 3 in. (750 Pa), 4 in. (1000 Pa), 6 in. (1500 Pa), and 10 in. wg (2500 Pa)]. If the designer does not designate pressure class for duct construction on the contract drawings, the basis of compliance with the SMACNA *HVAC Duct Construction Standards* is as follows: 2 in. wg (500 Pa) for all ducts between the supply fan and variable volume control boxes and 1 in. wg (250 Pa) for all other ducts of any application.

Some sealants can adversely affect the release function of breakaway connections to fire dampers; consult the damper manufacturer for installation restrictions.

Table 1-1 Standard Duct Sealing Requirements		
Seal Class	Sealing Requirements	Applicable Static Pressure Construction Class
A	Class A: All Transverse joints, longitudinal seams, and duct wall penetrations	4 in. wg and up (1000 Pa)
B	Class B: All Transverse joints and longitudinal seams only	3 in. wg (750 Pa)
C	Class C: Transverse joints only	2 in. wg (500 Pa)
In addition to the above, any variable air volume systems duct of 1 in. (250 Pa) and 1/2 in. wg (125 Pa) construction class that is upstream of the VAV boxes shall meet Seal Class C		

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