

Typical Applications

- Rigid high temperature gaskets and seals
- High temperature baffles and muffles
- Flue and chimney linings in furnaces and kilns
- Infrared element supports
- Glass tank side and endwall and port neck insulation
- Trough and distribution linings for conveying molten metals
- Thermal insulation where high velocities are encountered
- Heat shields for personnel protection
- Hot gas duct linings
- Low and high temperature driers
- Furnace linings
- Refractory backup for brick and castable
- Pouring forms for castables
- Expansion joint material

Specifications

Fiberfrax Duraboard HD conforms to U.S. Coast Guard requirements for "Incombustible Materials", subpart 164.009. For additional conformations, see list of specification approvals.

Duraboard HD

Thermal Conductivity vs Mean Temperature (per ASTM C177)**



Duraboard HD**

Hot Face °C (°F)	Insulation Thickness - mm (inches)									
	Cold Face Temperature - °C (°F)									
	13 (½)	25 (1)	38 (1½)	51 (2)	64 (2½)	76 (3)	89 (3½)	102 (4)	127 (5)	153 (6)
538 (1000)	179 (354)	128 (262)	104 (219)	90 (194)	80 (176)	73 (164)	68 (155)	64 (147)	58 (136)	53 (128)
593 (1100)	194 (382)	139 (282)	113 (235)	97 (206)	87 (188)	79 (174)	73 (163)	68 (155)	62 (143)	57 (134)
649 (1200)	210 (410)	150 (302)	122 (251)	104 (220)	93 (199)	84 (184)	78 (173)	73 (164)	66 (150)	61 (141)
704 (1300)	226 (439)	161 (322)	131 (267)	112 (234)	99 (211)	91 (195)	83 (182)	78 (172)	69 (157)	64 (147)
760 (1400)	242 (468)	173 (343)	140 (284)	120 (248)	106 (223)	97 (206)	89 (192)	83 (181)	74 (165)	68 (154)
816 (1500)	258 (497)	184 (364)	149 (301)	128 (262)	113 (236)	103 (217)	94 (202)	88 (190)	78 (173)	72 (161)
871 (1600)	274 (526)	197 (386)	159 (318)	136 (277)	121 (249)	109 (229)	101 (213)	94 (200)	83 (181)	76 (168)
927 (1700)	291 (555)	209 (408)	169 (336)	145 (293)	128 (263)	116 (241)	107 (224)	99 (210)	88 (190)	80 (176)
982 (1800)	307 (585)	221 (430)	179 (355)	153 (308)	136 (276)	123 (253)	113 (235)	105 (221)	93 (199)	84 (183)
1038 (1900)	323 (614)	234 (453)	189 (373)	162 (324)	144 (291)	130 (266)	119 (247)	111 (231)	98 (208)	89 (192)
1093 (2000)	340 (644)	246 (475)	200 (392)	172 (341)	152 (305)	137 (279)	126 (259)	117 (242)	103 (218)	93 (200)
1149 (2100)	357 (674)	259 (499)	211 (412)	181 (358)	160 (320)	145 (293)	133 (271)	123 (254)	109 (228)	98 (209)
1204 (2200)	373 (704)	272 (522)	222 (431)	191 (375)	169 (336)	152 (306)	140 (284)	130 (266)	114 (238)	103 (218)
1260 (2300)	390 (734)	285 (545)	233 (451)	200 (392)	177 (351)	161 (321)	147 (297)	137 (278)	120 (248)	108 (227)

**All heat flow calculations are based on a surface emissivity factor of .90, an ambient temperature of 27°C (80°F), and zero wind velocity, unless otherwise stated. All thermal conductivity values for Fiberfrax materials have been measured in accordance with ASTM Test Procedure C-177. When comparing similar data, it is advisable to check the validity of all thermal conductivity values and ensure the resulting heat flow calculations are based on the same condition factors. Variations in any of these factors will result in significant differences in the calculated data.



Thermal Products Company, Inc.
4520 S. Berkeley Lake Rd.
Norcross, GA 30071-1639

Phone: 770-662-0456
Fax: 770-242-6210
www.thermalproductsco.com
info@thermalproductsco.com