



# THERMAFIBER® K-FAC® SR

## HIGH-DENSITY SEMI-REFRACTORY FELT

### NON-CORROSIVE • FIRE RATED • EASILY APPLIED • NON-ASBESTOS

For insulation of high-temperature ovens, furnaces, kilns and vessels

#### Economical, High Performance Insulation

K-FAC SR High-Density, Semi-Refractory Felt (nominal 14-lb./cu.ft. density) provides high-temperature insulating properties with excellent workability and easy application. Nonload-bearing, it is a selected blend of high-density mineral fiber with a resin binder. Does not contain asbestos.

#### Up to 1900 °F Service Temperature

Recommended for maximum hot-surface temperature applications up to 1900°F one side (enclosed panel only) per ASTM C356 and C411. Uses above 1400°F are to be limited to static applications. At temperatures above 1400°F, vibrations may cause degradation of the insulation.

The first time this material is put into service only, heat rise should not exceed 15°F per minute. This will allow the binder to dissipate uniformly. Thermal conductivity is not affected.

#### Versatile Uses

Performs effectively over a wide range of uses, especially when replacing mineral wool board and calcium silicate insulations in high heat ovens, furnaces, precipitators, firedoor cores and many other similar installations. Not for use in load-bearing situations or to be subjected to direct flame impingement.

#### Nonabsorbent, Corrosion-Resistant

Absorbs less than 1% moisture. Does not corrode steel or aluminum as tested per HH-1-558B.

#### Easily Applied

K-FAC SR High-Density, Semi-Refractory Felt fabricates easily for ready application. Can be grooved, routed, slotted, die-cut, etc., to desired size and shape. K-FAC SR can be faced with a nonwoven glass mat that makes cutting and forming around curved surfaces easy to do. Since K-FAC SR is a high-density felt, it can be easily impaled. Recommended attachment is by impaling on pins or studs.

### Physical Properties

#### Fire Rated Performance:

Withstands ASTM E119 temperature for over 5 hours when mechanically supported.

#### Surface Burning Characteristics:

Flame Spread 0

Smoke Developed 0, (Per ASTM E-84)

#### Chemical State:

High melt point, mineral fiber formulation.

#### Physical Data

Average compressive load to 10% deformation <sup>(1)</sup>	Linear shrinkage max./24 hr. at 1900°F <sup>(2)</sup>
520 psf	2%

(1) Per ASTM C165

(2) Per ASTM C356

#### Specification Compliance

Federal Spec. HH-I-558B, Class 5, ASTM C612, Class 5 (exception is compressive strength). Meets applicable analysis for chloride content on the basis of plot points for austenitic stainless steel per Military Spec. MIL-I-24244A.

#### Specific Airflow Resistance of 14 lb./cu. ft. density Thermafiber Industrial Felt

Thickness (inches)	Specific Airflow Resistance (mks-rayis)
1	2,500
2	5,000
3	7,500
4	10,000

### Thermal Conductivity

"K" (Btu/in./sq. ft./°F) mean temperature (°F)						
300°F	400°F	500°F	600°F	700°F	800°F	900°F
0.37	0.43	0.48	0.57	0.65	0.75	0.85

Per ASTM C177 or C518 test procedure.

### Sizes and Availability<sup>(1)</sup>

Minimum Thickness	Maximum Thickness*	Width	Length
1"	4"	6,12,24"	36"
1"	4"	12,24"	48"

(1) Thickness from 1" to 4" in 1/2" increments. Thicknesses over 2" are laminated and recommended for use in flat form only. If laminating is not desired, product can be double layered with joints staggered (certain types of fabrication may cause separation.) K-FAC SR, faced and plain, is available from our Wabash, Ind., plant only. Packaged in cartons.

The information presented herein represents typical or average values obtained by ASTM or other standard methods. The value will vary due to normal manufacturing variations. The person using this product must determine its suitability for a particular application.

**Safety First!** Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

For further information on these products including non-standard sizes, contact Thermafiber at the sales offices listed below.

**NOTICE:** We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.



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