

## CERAMIC FIBER BLANKET

1260–1430°C Classification · 96–128 kg/m<sup>3</sup> · 92% Lighter Than IFB · 50% Faster Heat-Up



### PRODUCT OVERVIEW

Vuulcan CFB Series are alumina-silicate ceramic fiber blankets designed for industrial furnace backup lining, thermal insulation, and expansion joints. 92% lighter than IFB (25 kg/m<sup>2</sup> vs 320 kg/m<sup>2</sup>) with 50% faster heat-up time. Controlled shot content ≤12% ensures less dust and better fiber integrity. From China's largest ceramic fiber production cluster in Zibo.

### KEY FEATURES

- ✓ 92% weight reduction vs. traditional brick lining
- ✓ 50% faster startup — 2–3 hours vs. 6–8 hours
- ✓ Continuous installation — no joints, no thermal bridging
- ✓ Shot content ≤12% (high-purity grades)
- ✓ 4 temperature grades: 1260 / 1260HP / 1400 / 1430°C
- ✓ AES (bio-soluble) grades available on request

### TECHNICAL SPECIFICATIONS (4 GRADES)

GRADE	CLASSIFICATION TEMP	DENSITY	THICKNESS	λ (W/M·K)*	SHOT CONTENT	TYPICAL APPLICATION
CFB-1260	1260°C	96 kg/m <sup>3</sup>	25 / 50mm	0.12	≤ 15%	General backup, low-temp zones
CFB-1260HP	1260°C	128 kg/m <sup>3</sup>	25 / 50mm	0.10	≤ 12%	High-purity, clean environment
CFB-1400	1400°C	128 kg/m <sup>3</sup>	25 / 50mm	0.14	≤ 12%	High-temp backup layer
CFB-1430	1430°C	128 kg/m <sup>3</sup>	25 / 50mm	0.16	≤ 10%	Critical high-temp zones

\* λ = Thermal Conductivity at mean temperature 400°C. Lower = better insulation.

**Weight Comparison:** CFB-1260HP (25mm + 50mm backup) = ~25 kg/m<sup>2</sup>. Traditional IFB lining (3 layers × 115mm) = ~320 kg/m<sup>2</sup>. **That's 92% weight reduction.**

### PHYSICAL & THERMAL PROPERTIES

GRADE	AL <sub>2</sub> O <sub>3</sub> + SiO <sub>2</sub>	LINEAR SHRINKAGE (24H @ MAX TEMP)	TENSILE STRENGTH	STANDARD ROLL SIZE
CFB-1260	≥ 99%	≤ 3.0%	≥ 0.08 MPa	7200×610mm
CFB-1260HP	≥ 99%	≤ 3.0%	≥ 0.10 MPa	7200×610mm
CFB-1400	≥ 99%	≤ 3.5%	≥ 0.10 MPa	7200×610mm
CFB-1430	≥ 99%	≤ 4.0%	≥ 0.12 MPa	7200×610mm

Custom widths and lengths available for large projects. Vacuum-compressed packaging reduces freight volume by 40%.

KEY PERFORMANCE ADVANTAGES VS. TRADITIONAL LINING

92%

Weight Reduction  
25 kg/m<sup>2</sup> vs 320 kg/m<sup>2</sup>

50%

Faster Startup  
2-3 hr vs 6-8 hr

Zero

Thermal Bridging  
Continuous, no joints

Lower thermal mass = faster cycling. Critical for batch furnaces with frequent startups.

RELATED PRODUCTS (COMPLETE FIBER SYSTEM)

PRODUCT	FORM	DENSITY	TYPICAL APPLICATION
Ceramic Fiber Module	Folded blanket	128-160 kg/m <sup>3</sup>	Hot face installation, stud anchoring
Ceramic Fiber Board	Rigid board	220-350 kg/m <sup>3</sup>	Structural insulation, door linings
Ceramic Fiber Paper	Thin sheet	120-180 kg/m <sup>3</sup>	Gaskets, expansion joints, seals
Ceramic Fiber Rope/Tape	Twisted/woven	Variable	Door seals, pipe wrapping, packing

QUALITY CONTROL & TESTING (PER PRODUCTION BATCH)

1	Density verification (±5 kg/m <sup>3</sup> tolerance)	ASTM C167	2	Shot content analysis (screen test)	ASTM C892
3	Thermal conductivity (hot wire method)	ASTM C182	4	Linear shrinkage (24h @ max temp)	GB/T 3003
5	Tensile strength testing	ASTM C1102	6	Chemical composition (XRF analysis)	ISO 10635

APPLICABLE STANDARDS & CERTIFICATIONS

PRIMARY STANDARD

ASTM C892

CHINESE NATIONAL

GB/T 3003

INTERNATIONAL

ISO 10635

QUALITY SYSTEM

ISO 9001:2015

TEST METHODS

ASTM C182, C1102

BIO-SOLUBLE (AES)

Available on request

ISO 9001

ASTM C892

GB/T 3003

COA INCLUDED

AES OPTION

ORDERING INFORMATION

Model nomenclature: **VRF - CFB-1260HP - 128 - 50**

**VRF** = Vuulcan Refractory · **CFB-XXXX** = Grade (1260/1260HP/1400/1430) · **Density** = 96 / 128 kg/m<sup>3</sup> · **Thickness** = 25 / 50mm

**Packaging:** Vacuum-compressed rolls (40% freight savings), plastic-wrapped · **Standard Roll:** 7200×610mm × 25/50mm thickness · **Lead Time:** 15-25 days production + shipping · **MOQ:** 500 m<sup>2</sup> per grade (mixed container acceptable) · **Pricing:** FOB Qingdao or CIF destination · **Contact:** inquiry@vuulcan.com · WhatsApp: +86 130 5488 5665

**Disclaimer:** Information believed accurate but provided without warranty. Specifications subject to change without notice. Users should independently evaluate product suitability for specific applications. **Ceramic fiber is NOT for direct slag contact or abrasive wear zones.** Use as backup insulation layer only. This document does not constitute a contractual obligation. For binding specifications, refer to purchase order confirmation and Certificate of Analysis. Handle ceramic fiber with appropriate PPE in accordance with local safety regulations.