

CFC HD - High Density Fibre Cement Panel / Plank

Comprehensive overview of CFC HD fiber cement board specifications, properties, and applications for construction professionals.

01 PRODUCT APPEARANCE AND COLOR

SURFACE TEXTURE

CFC HD boards feature a smooth, uniform surface. The material has a professional finish ready for various applications.

COLOR OPTIONS

Standard color is natural gray. Custom colors available upon request. Color remains consistent throughout production batches.

EDGE FINISH

Boards have clean-cut, square edges. Precision manufacturing ensures consistent edge quality across all panels.



HD Lattice

Sleek, linear protrusions



HD Panolith

Earthy and grounded

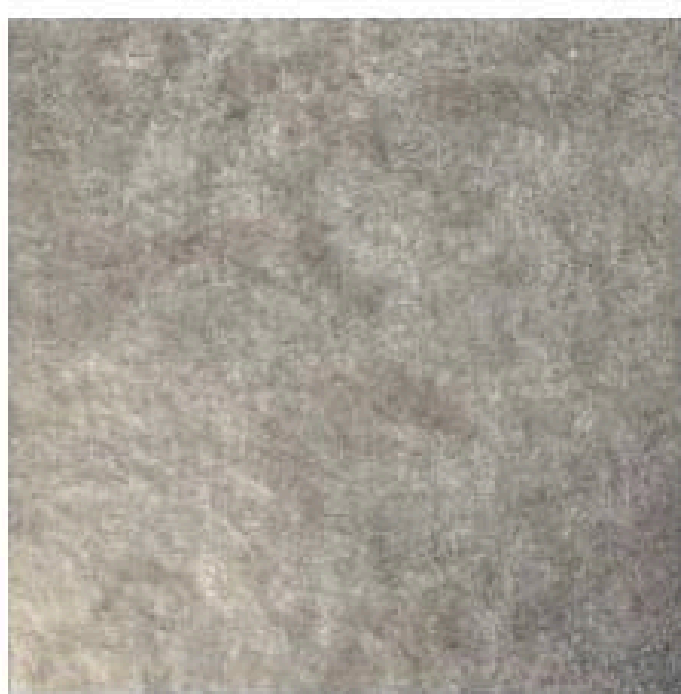


HD Serene

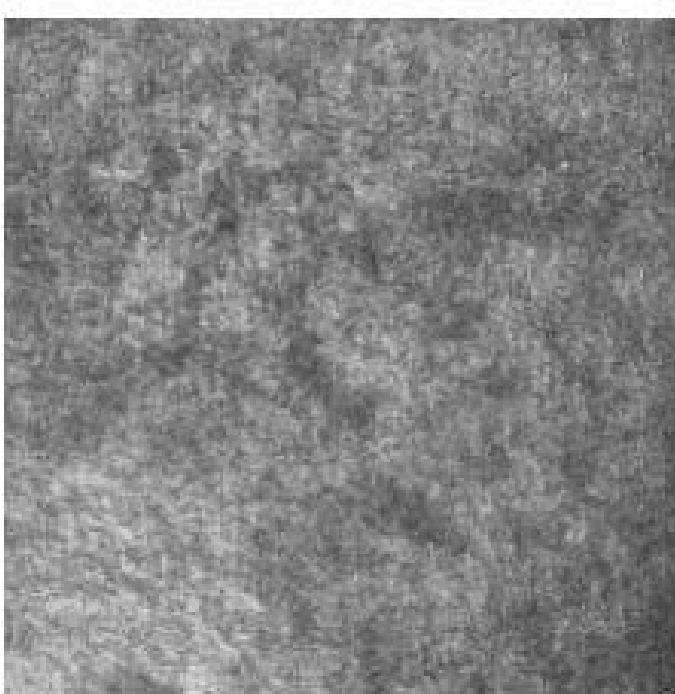
Gentle, ultra-matte finish



Pewter



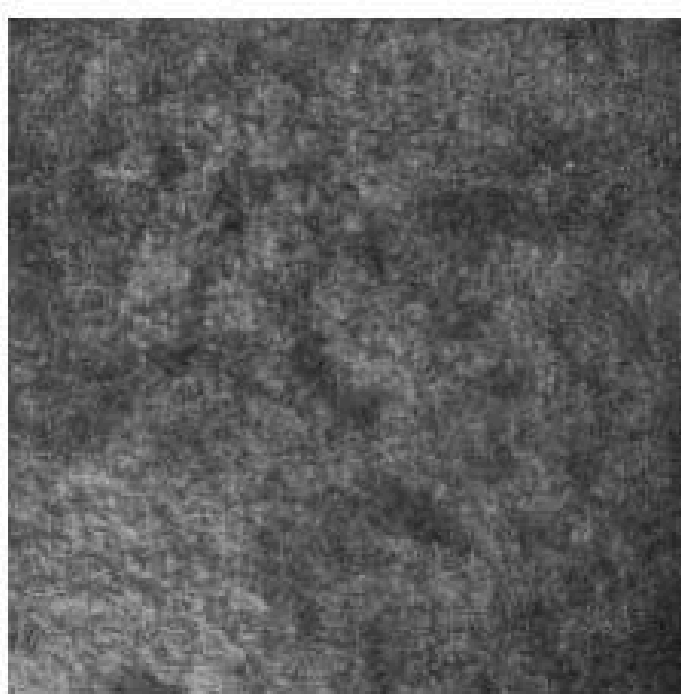
Ash



Medium Gray



Midnight



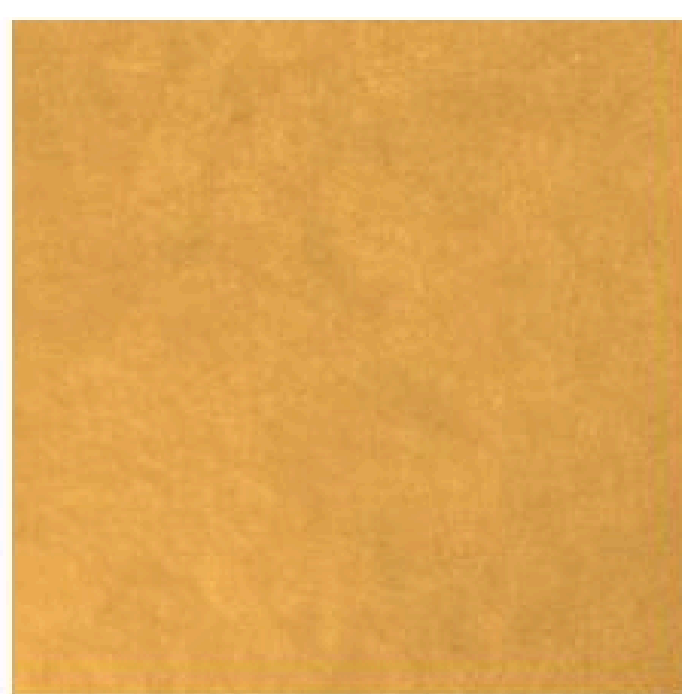
Dark Ash



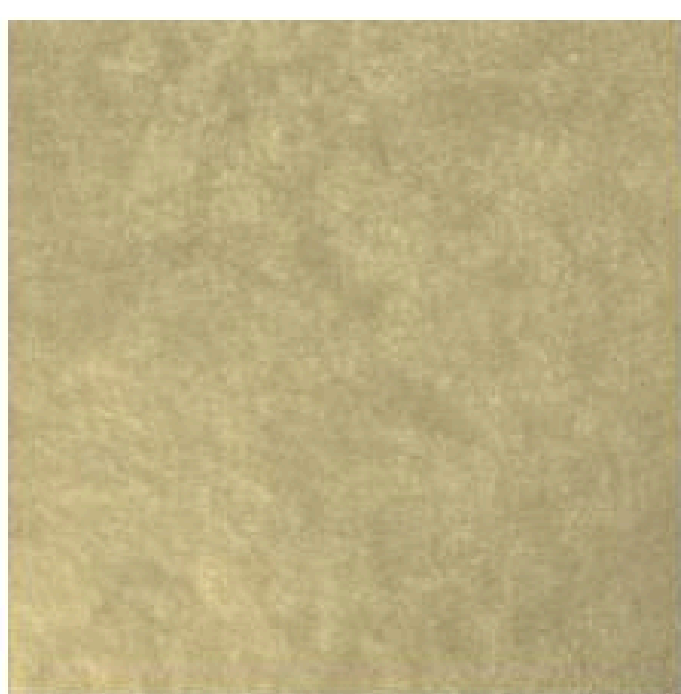
Dove



Dune



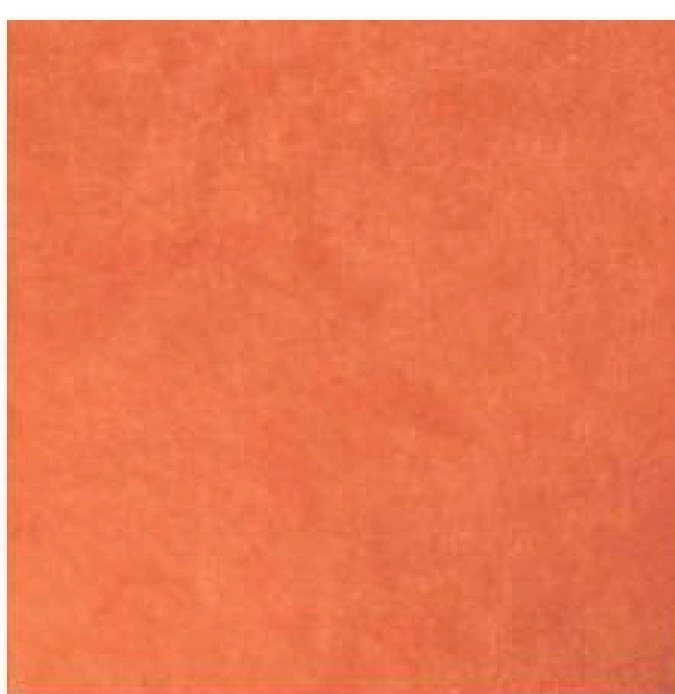
Sandstone



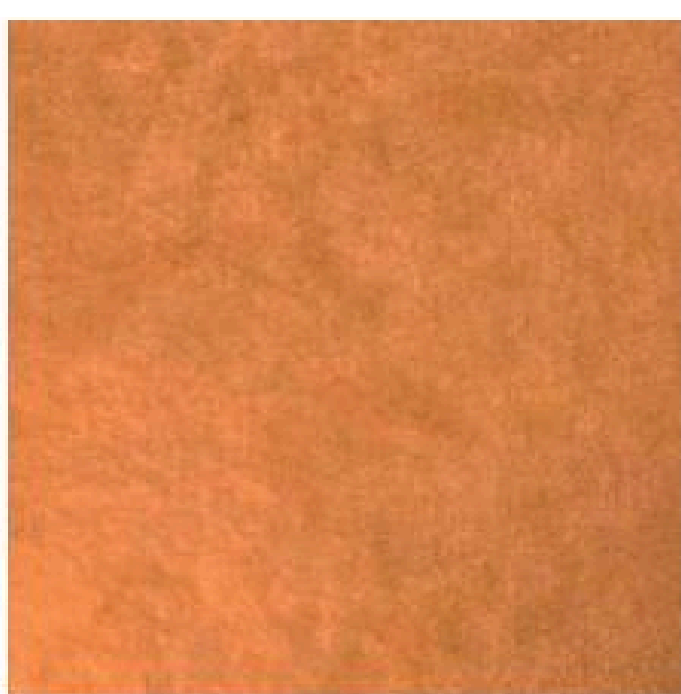
Olive



Java



Coral

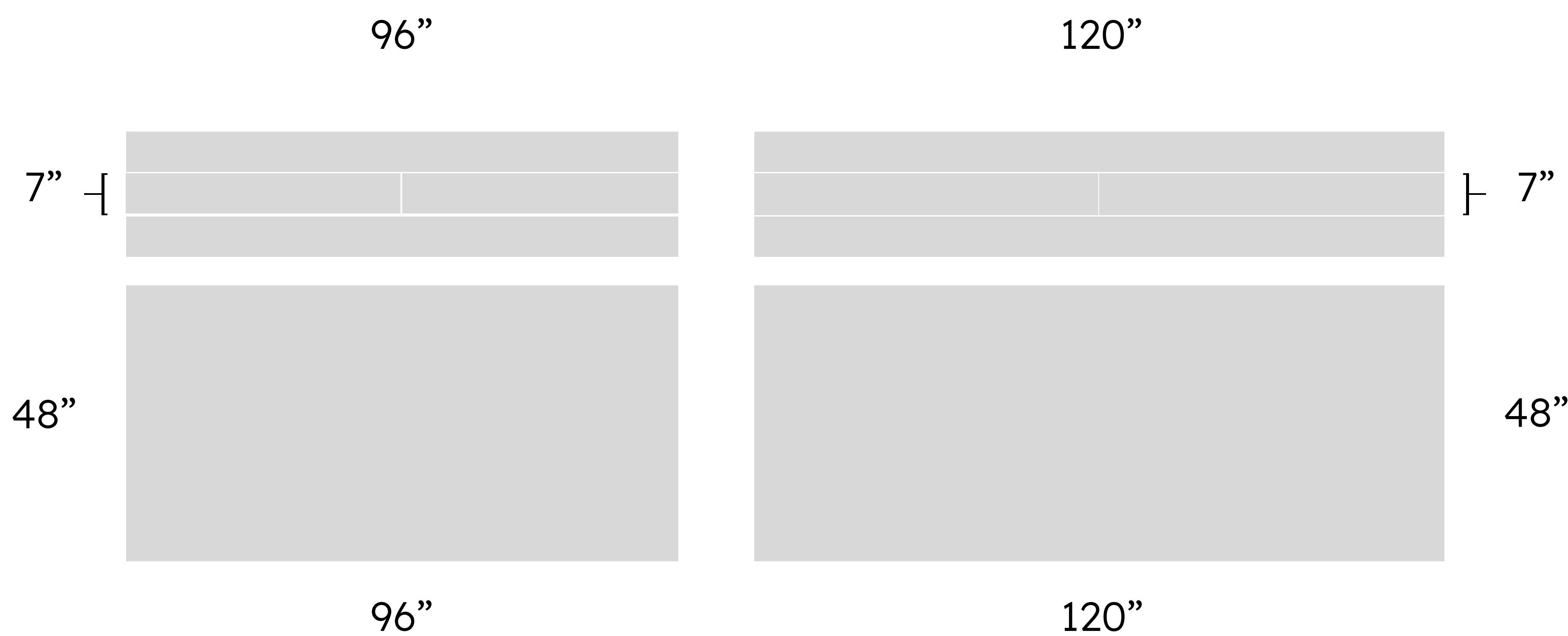


Copperdawn

02 PRODUCT COMPOSITION

STANDARD DIMENSIONS & TOLERANCES

CFC HD is manufactured with consistent quality and uniform distribution of fibers throughout the material, contributing to the board's exceptional strength and durability characteristics.



Dimensions	48 x 96" (Panel) 7 x 96" (Plank)	Length Tolerance	± 2 mm
Thickness	8 mm, 10 mm, or 12 mm	Width Tolerance	± 2 mm
Nominal Weight	14 kg/m ²	Thickness Tolerance	± 0.5 mm

PHYSICAL PROPERTIES

The composition of CFC HD creates a durable, dimensionally stable material that performs exceptionally well in various construction applications. The high density of CFC HD boards ($\geq 1600 \pm 50$ kg/m³) contributes to their exceptional performance characteristics, including impact resistance and sound attenuation properties.

≥ 1500

Density (kg/m³)

±50 kg/m³ tolerance

≥ 18

Bending Strength (MPa)

Wet condition testing

8-12%

Natural Humidity

Optimal moisture content

$\leq 25\%$

Water Absorption

Maximum wet over dry

The boards maintain a natural humidity level between 8-12% under standard conditions, which helps prevent excessive expansion or contraction after installation. The controlled manufacturing process ensures consistent density throughout each panel, eliminating weak points that could compromise structural integrity.

The maximum water absorption rate of $\leq 25\%$ (wet over dry) indicates good resistance to moisture infiltration, making these boards suitable for applications in humid environments. The predictable moisture movement rates in both longitudinal (1.5mm/m) and transversal (1.3mm/m) directions allow designers to properly account for expansion and contraction when detailing installations.

02 PRODUCT COMPOSITION

HYGROMETRICAL PROPERTIES

CFC HD boards exhibit exceptional mechanical properties that make them suitable for demanding construction applications. The bending strength in wet conditions is ≥ 18 MPa, demonstrating the material's ability to maintain structural integrity even when exposed to moisture. This characteristic is particularly valuable in exterior applications.

Moisture Content	Natural humidity ranges from 8-12%
Dimensional Stability	Longitudinal movement: 1.5mm/m
Controlled Expansion	Transversal movement: 1.3mm/m
Water Resistance	Maximum absorption rate: $\leq 25\%$

03 MATERIAL PROPERTIES (ASTM)

THERMAL & VAPOR PROPERTIES

The thermal and moisture performance characteristics of CFC HD boards make them suitable for a wide range of applications in various climate conditions.

Thermal Conductivity	0.25 W/mK per EN 12664:2002
Vapor Resistance	Factor μ : 30 per EN 12572:2016
Durability Classification	Category A (EN 12467:2018)
Freeze-Thaw Resistance	Withstands 100 freeze-thaw cycles

FIRE RATING & SAFETY

CFC HD fiber cement boards demonstrate exceptional fire resistance properties, making them an ideal choice for applications where fire safety is a critical consideration. The material has been rigorously tested according to multiple international standards to verify its fire performance characteristics.

CAN/ULC S114	Classified as Class A non-combustible. Meets Canada's highest safety standards for construction materials.
CAN/ULC S102	Tested for flame spread and smoke development. Demonstrates low surface burning characteristics.
ASTM E136	Classified as CLASS A non-combustible material. Meets highest safety standards for building materials.
EN 12467 A1	Achieves A1 rating under European standards. No contribution to fire at any stage.
CE Marked Product	Fully compliant with European safety standards. Certified for construction applications.

04 APPLICATIONS

BUILDING TYPES & ENVIRONMENTS

The versatility of CFC HD boards is demonstrated by their wide range of applications across different building types and environmental conditions.

Exterior Cladding	Provides durable, weather-resistant facades for commercial & residential buildings.
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CFC HD fiber cement boards offer numerous advantages that make them a preferred choice for a wide range of construction applications.

KEY ADVANTAGES

- Exceptional dimensional stability with minimal expansion and contraction
- Superior moisture resistance compared to many alternative sheet materials
- Non-combustible composition providing excellent fire resistance
- Impact and abrasion resistance for durability in high-traffic areas
- Resistant to rot, fungi, and insect damage
- Workable with standard tools despite high strength characteristics
- Long service life with minimal maintenance requirements
- Environmentally responsible composition with no harmful volatile compounds

05 MAINTENANCE

REQUIREMENTS

Working with CFC HD fiber cement boards requires adherence to specific health and safety protocols to ensure worker protection during installation and modification. Additionally, proper maintenance practices help ensure the longevity and continued performance of installed materials.

Basic Cleaning	Simple soap and water maintenance. Avoid abrasive cleaners that may damage surface.
Periodic Inspection	Annual examination for damage. Check fasteners and sealants for integrity.
Refinishing	Repaint or reseal as needed. Follow manufacturer guidelines for coating products.
Certification	Complies with EN 12467:2018. Strength Class 4, highest durability category.

06 CERTIFICATION

STANDARDS

CFC HD fiber cement boards carry numerous certifications and comply with relevant standards that validate their performance characteristics and suitability for various building applications. These certifications provide important assurance to designers, specifiers, and building officials regarding material quality and compliance with building codes.

STANDARD/TEST	COMPLIANCE/RATING
EN 12467:2018 Durability	Category A
EN 12467:2018 Strength	Class 4
ASTM E136	CLASS A
EN 12467 Fire	A1 (Non-combustible)
Freeze-thaw performance	100 cycles
CAN/ULC S114	Yes
CAN/ULC S102	Yes
ASTM E330	Yes
ASTM C1185	Yes

The manufacturer maintains regular third-party testing and quality assurance programs to ensure consistent compliance with published specifications. Test reports from accredited laboratories are available upon request to verify specific performance characteristics for critical applications. The product warranty typically covers manufacturing defects for a period of 10-15 years, with specific terms varying by region and application.