



A strong, Moisture Resistant, and thermally insulated building envelope ensures the buildings' sustainability over time.



Efficient Building Envelope

Introduction to ACFA Shield	PAGES 02:03	
ACFA HD	04:12	
ACFA HD Technical Specs	13	Z
ACFA Plus	14:18	
ACFA Plus Technical Specs	19	
ACFA Deco	22:28	Ĺ



BUILDING ENVELOPE BENEFITS

ACFA Shield serves a variety of functions:

Support:

Building envelopes ensures strength and rigidity. Structural support is a critical component of a good building envelope, as it determines how to handle external loads and forces.

Control:

Since responsible energy consumption in climate control is a significant concern of building professionals, ACFA Shield's "building envelope" ensures better home insulation and the ability to keep conditioned air indoors.

Aesthetics:

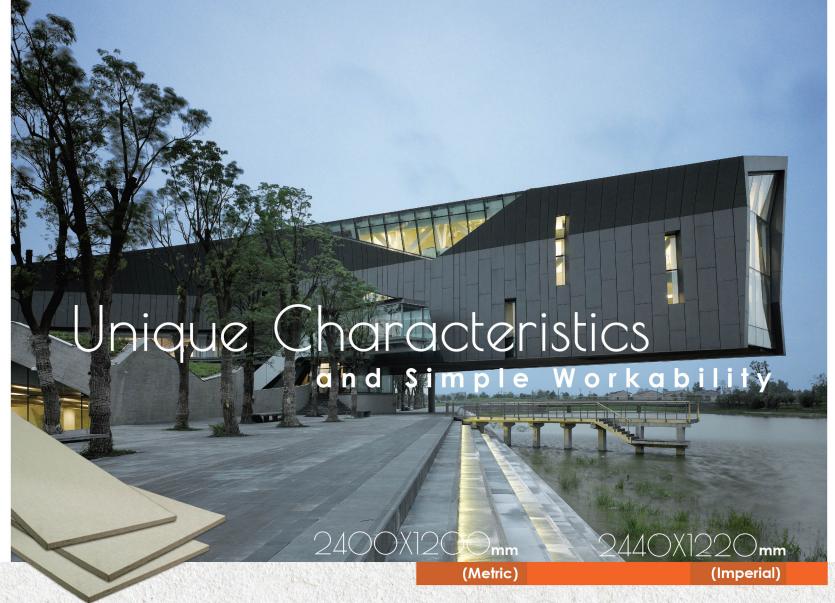
Aesthetics and looks are crucial considerations for building envelopes.

ACFA Shield ensures a perfect look and function formula.

ACFAHD®

ACFAPLUS®

ACFADECO®







مقاوم للرطوبة Moisture Resistant



مقاوم للحريق Fire Resistant



مقاوم للصدمات Impact Resistant



صديق للبيئة Eco Friendly





Tapered Edges 💌

Square Edges =

The perfect sheathing material for exterior walls. ACFA HD®, is easy to maintain, tough, moisture and fire-resistant, and a unique fiber cement composite of natural fibers bonded tightly in a high-grade silicate structure. The result is a material that is highly durable, flexible, water-resistant, fireproof, and resistant to insects and chemical corrosion with a neutral PH. ACFA High-Density boards are also highly workable and can be used in varied building applications by architects, project developers, and homeowners.

ACFA HD® High-Density Boards sustain prolonged exposure to the sun, rain, and UV. Backed up with High impact resistance and dimensional stability, these boards help create internal and external load-bearing walls that are stronger & long-lasting for a vast spectrum of commercial, industrial, and residential projects.

Standard Thicknesses

6 mm

mm

15 mm

(TE)

(SE)

Compatible

ACFAHD®

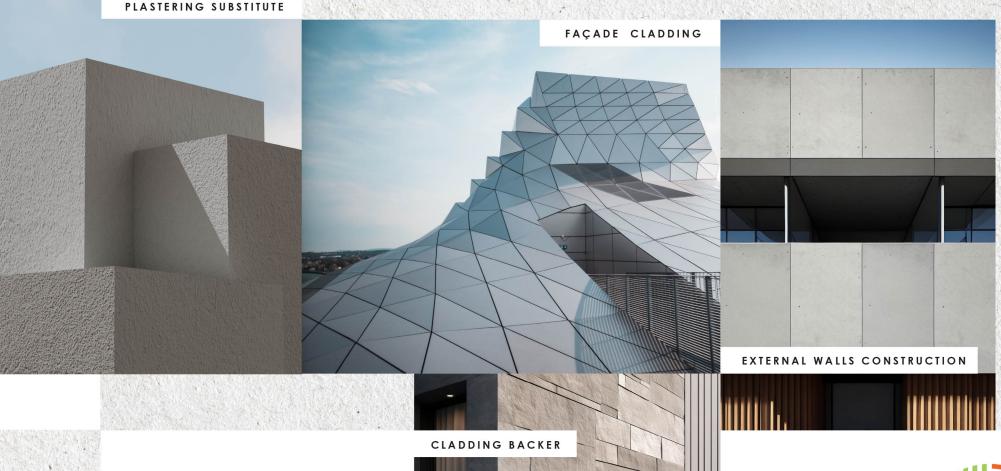
with any structural frame type



Compatible

with any final appearance finish

ACFA HD® can be combined with any finishing application. it may be used to replicate many other finish types, including stucco, stone, shingles, and more. This siding is as durable as cement, has a class 1A fire rating, is resistant to rot and wood-boring insects, and is not damaged by salt or UV radiation.











Architectural Freedom

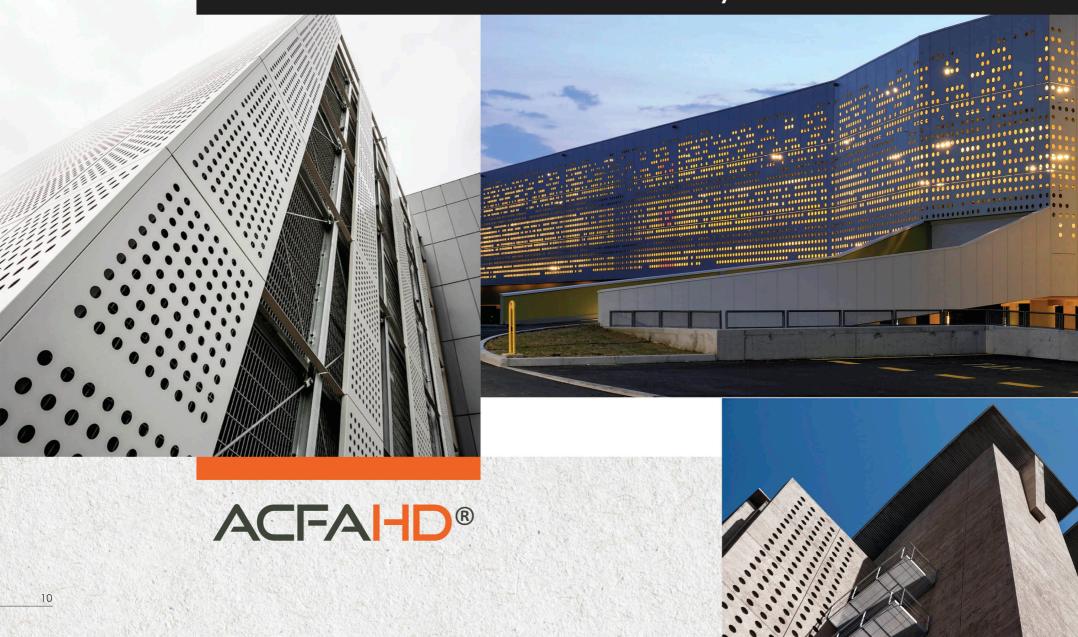
to design Curved Walls



ARCHITECTURAL SCREENS

Manipulate light, heat, and sound...

Increase Sustainability and Comfort.







While architectural screens may have begun as technical necessities to achieve passive solar design and privacy, they have quickly evolved into aesthetic features. These incredibly versatile and attractive additions are fast becoming a major design trend.

One of the great things about ACFA HD screens is the endless variety of expressions they can lend to homes and buildings. With ACFA HD technology and the ability to quickly and cost-effectively produce enchanting and effective Facade screening, Thanks to their easy workability, either using CNC machines or Water Jet, your imagination seems to be the only limit.

From a decorative point of view, the current trend is to incorporate geometric patterns to provide visual interest and cast light in attractive ways, ensuring the building ages gracefully in place.

In extreme climate conditions, where environment control is a significant consideration, architectural screens can manipulate light, heat, and sound to increase sustainability and comfort.

Solar Protection
Light Control
Privacy Control



ACFAHD®



ACFA HD® Boards sustain prolonged exposure to the sun, rain, and UV. Due to their unmatched weather-resistant, a perfect suit for claddings and facades, they also give an effortless joint-less panel design with a render finish or a uniform gap/groove & are ready-to-use and flexible.

They come pre-finished and are easy to install. With the convenient, durable, weatherproof Exterior Paints, the ACFA HD panel's Color Blending Options are limitless.





TECHNICAL SPECIFICATION

AS PER ASTM C118

10.	SI. No.	Product Characteristics	Requirement	Performance	
		Dimensional Tolerances			
	1	Thickness (mm) Up to 5 mm 5 mm to 10 mm 10 mm to 16 mm 16 mm to 20 mm	± 0.5 mm ±1.0 mm ± 1.3 mm ±1.5 mm	Within Standard	
	2	Length (mm)	±0.5% ± 6 mm (max)	Within Standard	
	3	Width (mm)	±0.5% ±6 mm (max)	Within Standard	
	4	Straightness of edges-mm/m	2.6(max)	1	
	5	Squareness of edges-mm/m	2.6(max)	2	
The Court		Physical Properties :			
	6	Category as per Standard	Type A	Туре А	
	7	Grade as per MOR	Grade - III	Grade - III	
1	8	MOR at Wet Condition (in MPa) Minimum	10	> 15	
	9	Density, Kg/m3	1450±5%	1500±50kg	
	10	Water Absorption (48 hrs. Test) %	≤33%	20%	
	11	Moisture Movement (mm/m)	< 0.05	0.04	
	12	Freeze-Thaw Performance -Observation Strength Retention	No deleterious effect ≥50 Cycles	Internal report	
	13	Heat / Rain test -Observation Structural Alternation	No Visible Cracks ≥50 Cycles	Internal report	
	14	Warm Water Test -Observation Strength Retention	No deleterious effect ≥50 Cycles	Internal report	
THE A	15	Surface Burning Characteristics - As per ASTM E 84-21a (9&18) mm Board	Flame spread Index = 0 Smoke developed Index ≤5	Passes the requirement	





مقاوم للماء Water Resistant



مقاوم للحريق Fire Resistant



مقاوم للعفن Mold Resistant



صديق للبيئة Eco Friendly





Tapered Edges

Square Edges -

ACFA Plus® is a specially engineered "water resistant" fiber cement board. Thanks to a Moisture Absorption value <%5, even less porosity than most Ceramic Tiles, achieved through the "dip-In" silicone coating, ACFA Plus is an ideal solution for Wet Area Lining and Semi Exposed Applications. It's also easy to work with, promoting safe and speedy construction.

As a complete and lightweight drywall system, it sets a new standard for strength, versatility, and performance. It can be shaped and curved into endlessly imaginative designs. It can carry a range of finishes from paint, render, and tiles to decorative cladding.

Its lightweight properties enable floor extensions and facade systems which repurpose old buildings and extend their service life. It's a sustainable and future proofed solution, helping create energy-efficient buildings.

Standard Thicknesses

7 | 10 | 10

Exceptional weatherproofing, outstanding benefits.



If the waterproofing fails,

you can rest assured that ACFA plus won't.

ACFA Exterior Wall with **ACFA Plus®** Technology comprises comprehensive system solutions, a premium product offering unrivaled performance in wet and humid conditions, helping to protect buildings quickly, effectively, and permanently. Manufactured from aggregated Portland cement.











ACFA Plus[®] scores a 10 out of 10 on ASTM D3273 for resistance to mold and mildew propagation under ideal fungal growth conditions.

ACFA Plus® board cuts easily with a regular scoring Knife and installs quickly with self-drilling screws.

Resistant to damage from moisture, it won't deform or lose its structural integrity, which means fewer callbacks and less costly rectifications.

ACFA Plus[®] has characteristics for hanging power for tiles, hooks, and fixtures, with a tensile bond strength of up to 75 % greater than wet area plasterboard.

Quick & easy configuration

from complex physical requirements to economic considerations

ACFA Plus® is applied in two basic construction types:

As drywall in skeleton constructions (e.g., reinforced concrete) or as a rear-ventilated rain-screen facade for use above solid substructures such as brick or concrete. In both cases, the primary construction carries the structural load, while the lightweight **ACFA Plus** carries its dead weight and the wind loads.





Performance

- 100 % water-resistant dimensional stability
- Mold and mildew resistant
- Freeze-thaw cycle proven
- Non-combustible (A1) complies with European standards
- Robust and reliable, safe and hygienic material

Installation

- Lightweight cement board less effort in handling
- Easy to cut using a simple score and snap technique
- No pre-drilling is required
- Bending radius of 3 m at full board size, and 1 m with 300 mm wide strips
- ACFA Plus is available in tapered board edge for seamless application.

Finishing

laminates • ceramic tiles • acrylic textures • marble • slate • granite









	SI. No.	Product Characteristics	Requirement	Performance
Dimensional Tolerances:		Dimensional Tolerances:		
	1	Thickness (mm) Up to 5 mm 5 mm to 10 mm 10 mm to 16 mm 16 mm to 20 mm	± 0.5 mm ±1.0 mm ± 1.3 mm ±1.5 mm	Within Standard
	2	Length (mm)	±0.5% ± 6 mm (max)	Within Standard
	3	Width (mm)	±0.5% ±6 mm (max)	Within Standard
	4	Straightness of edges-mm/m	2.6(max)	
	5	Squareness of edges-mm/m	2.6 (max)	
		Physical Properties :		
	6	Category as per Standard	Type A	Type A
	7	Grade as per MOR	Grade-II	Grade - II
	8	MOR at Wet Condition (in MPa) Minimum	7	> 9
	9	Density, Kg/m3	1300±5%	1300±50kg
	10	Water Absorption (48 hrs. Test) %	≤33%	<10%
	11	Moisture Movement (mm/m)	< 0.05	0.01
	12	Freeze-Thaw Performance -Observation Strength Retention	No deleterious effect ≥50 Cycles	Internal report
	13	Heat / Rain test -Observation Structural Alternation	No Visible Cracks ≥50 Cycles	Internal report
	14	Warm Water Test -Observation Strength Retention	No deleterious effect ≥50 Cycles	Internal report
	15	Surface Burning Characteristics-As per ASTM E 84-21a (9&18) mm Board	Flame spread Index = 0 Smoke developed Index ≤5	Passes the requirement



Available in

Heavy/Light Wood Grain Texture as well as sandstone texture



Fibre Cement Decorative Board



مقاوم للرطوبة Moisture Resistant



مقاوم للحريق Fire Resistant



مقاوم للعفن ، Mold Resistant



صديق للبيئة Eco Friendly



Chamfered Edges -

Square Edges -

ACFA Deco® decorative boards are fiber cement boards with a range of surface patterns embossed on the top surface of the board providing a unique look to any interior or exterior decorative facade applications or to mimic plank siding.

The ACFA Deco® Board range is a wide variety of decorative building boards for your building facade and decorative facade needs.

ACFA Deco® Board comes in an uncolored format and can be painted with any water-based acrylic paint. **ACFA Deco®** Board in the new 'Sand Stone' surface profile allows you to create a genuine stone look and feel to your interior or exterior walls.

Available in one standard thickness

mm

Enchanting looks,

TOutstanding Performance



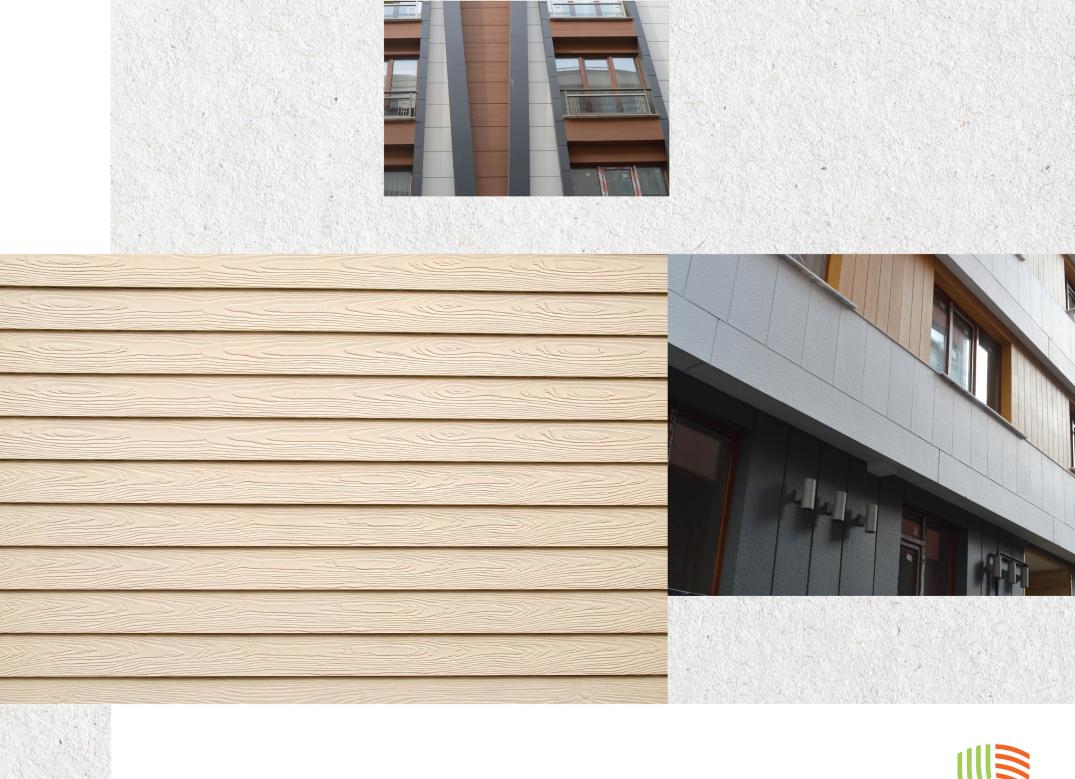
Enchanting looks

exceptional weatherproofing...!



Using fiber cement formulation, ACFA Cement Planks resist termites and moisture, do not rot or deteriorate, and provide long-lasting strength. These also provide outstanding weather ability with low maintenance. ACFA Cement Planks are available in a thickness of 8 mm and sizes 150 x 3000 mm, 200 x 3000 mm.









Responsible to Designers

Responsible to the Environment..!



With vital attributes, ACFA Cement Planks exhibits a superior cost advantage over wood and veneer products, thus giving you the experience of wood without its expense! Superior aesthetics underline how these planks help you score high on design but remain within your budget...!

An eco-friendly alternative to natural wood, ACFA Cement Planks are preferred by leading architects and designers to shape inspiring designs with responsibility to the environment.





ACFADECO®

TECHNICAL SPECIFICATION AS PER ASTM C1186

Enchanting looks, and Outstanding Performance

	SI.No.	Properties	Measurement	Value
	1	Density (EMC)	Kg/cum	> 1300
	2	Weight	Kg/sqm	11.5 +/- 0.6
	3	Thickness Tolerance	mm	+/- 0.5
	4	Flexural Strength (EMC)	Mpa or N/mm2	≥ 10
	5	Flexural Strength (Wet)	Mpa or N/mm2	≥ 7
	6	Water Absorption	%	33 % +/- 5
	7	Linear Coefficient of Thermal Expansion	mm/mm/o C	7.02 x 10-6
_	8	Thermal Conductivity	W/m K	0.201
	9	Moisture Movement	%	< 0.05
	10	Direct Screw Withdrawal Strength	N	≥ 1290
	11	Nail Withdrawal	N	≥ 1040
	12	pH Value		7-8
	13	Fire Resistance Class	Non Combustible	Class A1 As per EN 135



