## CEMBRIT

# Cembrit Windstopper

Extreme and Basic

Weatherproof and breathable barrier made of fibre cement



CEMBRIT WINDSTOPPER

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### The beauty of fibre cement

Fibre cement is a versatile building material that is ideal both as facade boards in a ventilated facade or as a building board used as a rain screen.

Fibre cement can absorb and release moisture without affecting the product's durability or need for maintenance, it will never attract fungus or mold.

#### Rainscreens

A Cembrit facade structure is comprised of a self-ventilating system encompassing a rainscreen, a ventilated area and a weather barrier.

The basic purpose of a rainscreen is to keep the heat, rain and wind from affecting the inner structure and keeping it intact for years to come. Since modern facades have become more and more playful and utilising a mix of materials, the demands have increased even further for the weather barrier.

#### Why choose Cembrit Windstopper?

While the wear and tear of the rainscreen can be easily repaired, it can prove a costly affair to chose the wrong weather barrier.

Cembrit Windstopper has been designed with this durability in mind. As a producer, Cembrit has full knowledge of the harsh applications it must withstand in a changing climate. As a part of Cembrit's mission, we are determined to build better days for our customers. As a natural consequence of this, we are constantly improving our products to match the rising standards from both society and our customers. For Cembrit Windstopper, the demand for fire protection in building materials is essential! Cembrit's 9mm Windstoppers have been developed with fire protection as a key parameter making it a safe choice for our customers. We are not only building better days, but making it safer.

The Cembrit Windstopper range consists of three types of boards. Important for all of them are

15 year Cembrit warranty
Sintef approved - 12 month exposure\*
Rigid with a high racking strength
Perfect for open facades
Air tight breathable barrier
Fire resistant
Top class moisture resistance

### Cembrit Windstopper

Unlike competing weather barriers containing gypsum or magnesium, Cembrit Windstopper does not contain any salts or materials drawing moisture to the board, which can then spread into the structure and grow fungus or cause corrosion.

The Cembrit Windstopper boards come in three variants - each holding unique properties and usage.

Our Windstopper Extreme boards consist of 80% cement, 10% PVA fibres and 10% fillers making is capable of withstanding the weather for up to 12 months without a rain screen.

Cembrit Windstopper Extreme 9mm and Windstopper Basic 9mm both protect flamable material for 10 minutes and hold the covering class K1-10 B-S1,d0 stressing their excellent fire resistance.

Because of the raintight, yet breathable properties of all three Windstopper boards, you can place insulation in direct contact with the inner side of the board.

### Quality

Cembrit Windstopper boards are manufactured in Scandinavia and hold ISO 9001, 14001 and OHSAS 18001 certifications.

### 15 Year Cembrit Warranty

Cembrit's 15 year warranty is non graduated for the full period and covering both products and replacement work. This is your security for a reliable partner.

### Windstopper Extreme 9mm



### Windstopper Basic 9mm



### Windstopper Extreme 4.5mm



Product overview	Windstopper Extreme 9mm	Windstopper Basic 9mm	Windstopper Extreme 4.5mm	
Colours	Light grey Dark grey*	Basic grey	Light grey	
Reaction to fire	A2,s1-d0	A2,s1-d0	A2,s1-d0	
Covering class	K1-10 B-S1,d0 K1-30 B-S1,d0**	K1-10 B-S1,d0	Not rated	
Fire resistance of structures Steel frame	El 90 in to out + El 120 out to in	El 60 out to in + in to out	El 60 out to in	
Fire resistance of structures Wood frame	El 30 out to in	No classification	El 30 out to in	
Standard sizes Other sizes made to order (Max 1250x3150)	900x2700 1200x2700 1200x3000	1200x2400 1200x2700 1200x3000	900x2700 1200x2700 1200x3000	
Sintef approved exposure time	12 months uncovered if used with Cembrit Windstopper tape	6 months uncovered if used with Cembrit Windstopper tape	12 months uncovered if used with Cembrit Windstopper tape	
Water vapour resistance Z-value/sD	2.21/0.43	1.7/0.33	2.12/0.41	

<sup>\*</sup>Made to order

2 BUILD BUILD

<sup>\*</sup>Cannot be used as a permanent facade sheet in accordance to the guidelines provided by Cembrit on cembrit.com.

<sup>\*\*</sup> Possible when adding a Multi Force 12mm and A2 fixings

### Typical causes of failure from weather barriers

Choosing the right protection for your building can be difficult. The typical failures shown below, illustrate the demanding properties that a weather barrier must endure and the result if the wrong choices are made.



High windloads causing failure of membranes Loose membranes causing obstruction of needed ventilation behind facade boards.

Membrane sticking to the external rain screen leading to failure of the facade boards.



Inadequate fire protection

Using products with a subpar covering class especially in connection with flamable insulation can be fatal



#### Sound insulation

Sealing of joints or cracks may be insufficient leading to incomplete sound insulation of the walls causing heavy noise through the structure.



Air leakage and sturdiness

Manoeuvring tight spaces around the scaffolding at the building site causing damages to weatherboards leading to water ingress, heat loss and tedious repairs.



Build-up of mould

Leakage of vapour barrier causing build-up of moisture and mould and potential radon pollution.



### Cembrit Windstopper

### Sturdiness and sound insulation

The rigid and solid fibre cement structure of Cembrit Windstopper will help you avoid these failures while the high density and stiffness provides significantly higher airborne sound insulation than similar weather barriers.

Product	Rw (dB)	Rw + C (dB)	Rw + Ctr (dB)
Windstopper Extreme 9mm	31	29	28
Windstopper Basic 9mm	32	30	29
Windstopper Extreme 4.5 mm	29	28	25

### Air leakage and heat loss

Cembrit Windstopper used with Windstopper tape, as an alternative to other breather membranes, will help improve air tightness. This coupled with a good Vapour Control Layer is an important step in passing a blower-door test and improving the effectiveness of insulation thereby reducing heating and cooling costs.

### Racking Strength

The high racking strength of up to 5.26 kN per board of Cembrit Windstopper Extreme and 2.66 kN on Windstoper Basic enables effective modular building of crawl space ceilings and rigid exterior walls for easy transportation, thereby helping to reduce the needed structural support and saving money on other materials and construction time.

### Fire protection

The excellent fire resistance of Cembrit Windstopper meet the European covering class of 10 minutes fire resistance and can protect buildings for up to 120 minutes. Perfect for designing a fire escape plan.

BUILD



### Partially open facade

As the current building trend is moving towards combining various materials in a playful way, choosing the right material including the weather barrier have become even more essential.

A significant element of this trend involves leaving parts of the facade open or partially open.

As the only weather barrier on the market, it is possible to install a permanently open rainsceen of up to 20% using 9mm Windstopper Extreme - thereby reducing the needed facade material and costs.

Partially open facades are directly exposed to the suns UV rays, as well as being visible through the rain screen. As a way of accommodating this trend, Cembrit is offering the Windstopper Extreme in dark grey making it less visible.



Facade build-up shown:
20% partially open facade
Cembrit Ventilated Steel Battens
Windstopper Extreme 9mm Dark Grey

### Accessories



### Fastening

Cembrit Windstopper Screws make it possible to fasten very close to the edges. They hold a corrosion resistance of C4 which have been especially developed for use in harsh environments.

They come in plastic bags of 500 pcs ready to be put in the toolbelt. Or as collated of 1.000 pcs.



### Superior air and rain tightness

Using Cembrit's unique fire-retardant Windstopper Tape will aid the installer in easily securing the weather barrier with no additional caulking.

Together with Cembrit Windstopper, it has been approved by accredited test institute Sintef for 100% air and water tightness. It was tested in the tough Norwegian climate of up to 12 months.

Cembrit Windstopper Tape will stick to the surface regardless of the weather and in temperatures down to -20°.



### Installation speed

Using a clout head nail gun to fasten any Cembrit Windstopper board to wood will speed up the installation process.

Also our 4.5 mm Windstopper Extreme can now be nailed on steel with a coil nail from our fastening partner.

Cembrit has developed both nails to match the properties of Cembrit Windstopper boards and secure an easy installation while avoiding any failiures and cracks when installing.



#### Ease of use

Cutting of Cembrit Windstopper can be done with Cembrit Scratch Knife using a score and snap method or a Cembrit Saw Blade for fibre cement. Making on-site cutting easy and accessible even in sound sensitive areas. The low weight of 7,6 kg/m2 of Cembrit Windstopper Extreme 4.5mm makes it ideal for on-site handling.

Cembrit also offer our key customers ordering with custom sizing, marking and palletizing suitable for modular building or project sales.

6 BUILD

### **CEMBRIT**

### www.cembrit.com

Please visit the local website for contact details and further information.

Cembrit is one of the leading European manufacturers of multi-capability fibre-cement building products. Our products and solutions add exciting new design opportunities for moulding attractive, durable settings for people's lives. But Cembrit is more than mere products. We also help make all kinds of design and construction projects easier – as well as more profitable, inspiring and effective.

And for us, all construction also involves building relations with people, making your day better, and helping you make the day better for others. Making it a day to remember.