

# X-Pruf InsulationBoard

## Extruded polystyrene rigid foam

### Product Description

X-Pruf Insulation Board is manufactured by a continuous extrusion process which imparts a characteristic closed cell structure giving the product its unique physical properties. Extruded polystyrene rigid foam has a high resistance to water absorption and good mechanical properties. The manufacturing process, combined with the inherent qualities of the inert component thermo plastic material gives InsulationBoard predictable long-term performance and high insulating value.

Available in various grades in shiplab and butt joint forms as show below:

X-Pruf InsulationBoard 28W

X-Pruf InsulationBoard 35R

X-Pruf InsulationBoard 38F

### Advantages

- Closed-cell and homogeneous structure
- Negligible moisture absorption
- Long-term high insulation efficiency
- Good mechanical strength
- Resistance to ageing and rotting
- Good dimensional stability
- High resistance to thermal cycling

### Uses

Thermal insulation board for

- Roofs
- Floors
- Walls

### Chemical Resistance

X-Pruf InsulationBoard is resistant to most commonly occurring construction materials like solvent-free bituminous compounds, water-based wood preservatives, lime, cement, plaster, anhydrous gypsum as well as alcohols, acids and alkalis. Certain organic materials like solvent based wood preservatives, coal tar and derivatives (creosol, etc) paint thinners and common solvents such as acetone, ethyl acetate, petrol toluene and white spirit will attack InsulationBoard resulting in softening, shrinkage and even dissolving with a consequent loss of performance.

### Laboratory Test Data

#### X-Pruf InsulationBoard 28W

Property	Typical Results
Density DIN 53420	26-28 kg/m <sup>3</sup>
Thermal conductivity at 10°C (50°F) DIN 52612	0.029
Compressive strength at 10% deflection DIN 53421	210 kPa
Water absorption by submersion DIN 53428	≤1%
Water vapor permeability ASTM E 9600	1.0

#### X-Pruf InsulationBoard 35R

Property	Typical Results
Density DIN 53420	32-35 kg/m <sup>3</sup>
Thermal conductivity at 10°C (50°F) DIN 52612	0.028
Compressive strength at 10% deflection DIN 53421	300 kPa
Water absorption by submersion DIN 53428	≤1%
Water vapor permeability ASTM E 9600	0.4-0.6

#### X-Pruf InsulationBoard 38F

Property	Typical Results
Density DIN 53420	38-45 kg/m <sup>3</sup>
Thermal conductivity at 10°C (50°F) DIN 52612	0.027—0.026
Compressive strength at 10% deflection DIN 53421	500-700 kPa
Water absorption by submersion DIN 53428	<1%
Water vapor permeability ASTM E 9600	0.6-0.4

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### **Sizes (Board Dimensions) (mm)**

X-Pruf InsulationBoard with shiplap edges  
Thickness: 30, 40, 50, 60, 75, 80, 100 mm  
Width: 600 mm (covering dimension)  
Length: 1250 mm (covering dimension)

X-Pruf InsulationBoard with butt joints  
Thickness: 20, 25, 30, 40, 50, 60, 75, 80, 100 mm  
Width: 600 mm  
Length: 1250mm  
Other thickness are available upon request.

### **Shelf Life**

Indefinite when stored under shade in a dry environment.

### **Bonding**

Depending upon the application method and design various bonding methods can be adopted. Consult NCC X-Calibur for further information.

### **Health and Safety**

**This product is not considered hazardous.**

### **Authorized Technical Specialist**

Please note that only NCC X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit [www.ncc.com.eg](http://www.ncc.com.eg) for a full list of NCC X-Calibur ATs.

### **Datasheet Validity**

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on [www.ncc.com.eg](http://www.ncc.com.eg) to ensure you have the latest version.

### **Warranties**

NCC X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.