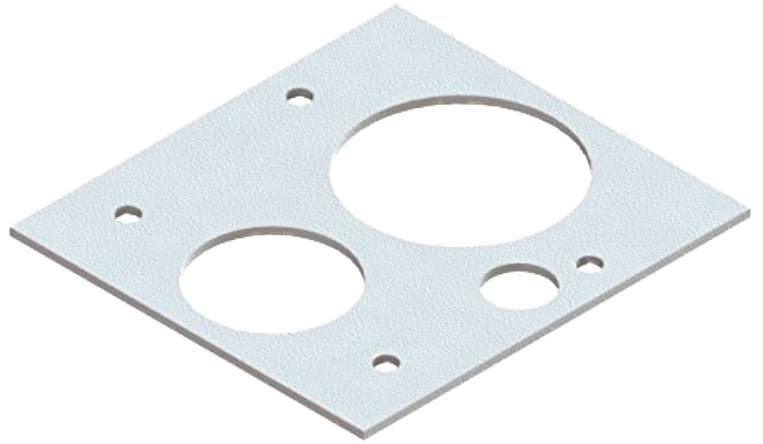


## PRODUCT DESCRIPTION

**SUPERWOOL 607 406-E expandable paper is an intumescent material produced from a unique blend of Superwool bulk fibres, special additives, and organic binders.**



At maximum expansion which occurs at approximately 1200°F (649°C), the paper expands up to 400% of its thickness. This results in the Superwool 607 406-E paper being an excellent candidate for high-temperature gaskets and seals, and fire protection applications. During heat up and expansion, there will be some additional out-gassing of the intumescent additives.

Superwool Papers are specially processed to offer excellent performance in high-temperature applications. These materials offer an alternative to traditional solutions due to their unique properties of high refractoriness and excellent nonwetting characteristics to applications requiring direct contact with molten aluminium. Superwool provides stability and resistance to chemical attack. Exceptions include hydrofluoric acid, phosphoric acid and strong alkalis (i.e. NaOH, KOH). It is unaffected by incidental spills of oil or water. Thermal and physical properties are restored after drying.

### MATERIAL TYPE

- Alkaline Earth Silicate (Aes) Wool
- Cas Number: 329211-92-9

### FEATURES

- Low thermal conductivity and heat storage
- Easily die cut for high-temperature gasketing and seals
- Thickness expansion up to 125%

### APPLICATIONS

- All-purpose, high-temperature gasketing and sealing
- Fire protection
- Fire doors
- Expansion joint insulation
- Fireplace catalytic converter gasketing
- Aluminium filter bowl gasketing

# SUPERWOOL 607



PHYSICAL PROPERTIES	
Colour	Grey/white
Density, pcf (kg/m <sup>3</sup> )	21 - 25 (336 - 400)
Continuous use limit, °F (°C)	1832 (1010)
Maximum temperature rating, °F (°C)	2012 (1100)
Melting point, °F (°C)	2327 (1275)
Tensile strength, psi (Mpa)	75 - 100 (0.52 - 0.69)
Fired tensile strength, psi (Mpa)	5 - 10 (0.03 - 0.07)

CHEMICAL ANALYSIS	% WEIGHT BASIS AFTER FIRING
Silica, SiO <sub>2</sub>	55 - 65
Alumina, Al <sub>2</sub> O <sub>3</sub>	3 - 5
Calcium Oxide, CaO	20 - 30
Magnesium Oxide, MgO	5 - 7
Other	Trace
Organic binder	6 - 12
Fired tensile strength, psi (Mpa)	5 - 10 (0.03 - 0.07)

EXPANSION CHARACTERISTICS	% INCREASE
Mean temperature	0.16 in (4 mm)
1 hour @ 1000°F (538°C)	82
1 hour @ 1200°F (649°C)	107
1 hour @ 1400°F (760°C)	98

## STANDARD SIZES

THICKNESS IN (CM)	WIDTH IN (CM)	SQ. FT/ROLL (SQ. M)	MILL ROLLS, L.FT./ROLL (L. M.)
1/16 (0.16)	24, 48 (60,120)	500 (46.5)	750 (228)
1/8 (0.31)	24, 48 (60,120)	250 (23.2)	375 (114)
1/4 (0.63)	24, 48 (60,120)	125 (11.6)	185 (56)

## CHEMICAL PROPERTIES

A small amount of organic combustible binder will burn out at approximately 300°F (149°C).

Caution should be exercised during the initial heating. Adequate ventilation should be provided to avoid potential flash ignition of the binder out-gassing or avoid air entry while at elevated temperature.

*Temperature and pressure values cannot be reached simultaneously. This technical data sheet is a result of laboratory tests. E.Dobson & Co is issuing this data sheet as a pure informative document. More details and information are available from our technical department.*