

**Sheeps Wool rolls with Recycled Polyester  
for insulating your home**



ThermoFleece PB20 loft rolls

**ThermaFleece PB20 insulation rolls are ideal for use in both new-build and refurbishment projects. Applications include insulation of lofts – cold and warm roofs, and attic conversions. The sizes offered allow many combinations of thicknesses and widths to be selected. ThermaFleece batts are recommended for walls, ground floors and intermediate floors.**

Some benefits of installing ThermaFleece PB20 ...

- It is lightweight and easy to handle and install.
- The material can be easily cut to shape and size with a sharp knife.
- The product is completely safe to use causing no irritation to the skin, eyes or respiratory tract.
- Naturally breathable.
- The product is a hygroscopic material so can absorb and release water vapour without compromising its thermal efficiency – an important factor when refurbishing period or heritage buildings.
- Provides acoustic deadening of sound.
- Will remain an efficient insulator for many years.



Installing ThermaFleece PB20 in a new home

**Why wool insulation?**

Wool is a natural fibre from a fully renewable resource, consequently the life cycle of the product has an ideal energy balance. ThermaFleece PB20 is manufactured to a density of 20kg/m<sup>3</sup> giving a K-value of 0.042 W/m<sup>2</sup>K.

**Why buy ThermaFleece PB20 from nbs?**

**nbs** provides the most economic and easy way to specify ThermaFleece PB20 insulation. All you have to do is ascertain the U-values required, calculate the area to be insulated - round-up to the nearest nominal area, select the thicknesses and widths required, note the Order Codes, close this PDF then click the **Add to Cart** to progress your purchase. The insulation will be delivered direct to your home. Any excess insulation can be used to insulate the hot or cold water tank or simply added on top of the thickness installed.

ThermaFleece PB20 insulation rolls from nbs				
ThermaFleece PB20 thickness, width & length per roll mm	1x roll area m <sup>2</sup>	Number of rolls per pack *	Area per pack m <sup>2</sup>	Order code
100 x 370 x 5300	1.96	3	5.88	PB370100
100 x 570 x 5300	3.02	2	6.04	PB570100
70 x 570 x 7600	4.33	2	8.66	PB57070
55 x 570 x 9600	5.47	2	10.94	PB57055
* Please note, up to 9 packs can be supplied on one pallet.				

**Naturally Breathable**

ThermaFleece PB20 being hygroscopic, can absorb and release water vapour without compromising its thermal efficiency. It is therefore ideal for use in roofs and other timber framed structures. It is designed to avoid a damaging build-up of moisture by allowing water vapour to migrate through the structure. In this type of construction.

The performance of ThermaFleece PB20 can be further enhanced if a vapour-permeable breather membrane is used on its cold side to prevent the infiltration of wind driven cold air and dirt. A vapour-permeable membrane – available from **nbs** - is recommended to protect the insulation from dirt, dust and debris in order to maintain its designed performance levels. Heat loss by convection is also reduced because the insulation is protected by the breather membrane so preventing air movement across the surface.

**ThermaFleece PB20 makes your home cool in summer**

When the outside temperature increases and begins to heat the wool, it releases moisture; that has a cooling effect on the fibre which reduces the flow of heat to the inside of the building. This can reduce peak temperature by up to 7°C when compared to buildings in which alternative forms of insulation are installed.

**ThermaFleece PB20 makes your home warm in winter**

In the winter the absorption of moisture by wool insulation can increase peak temperature by up to 4°C when compared to buildings in which alternative forms of insulation are installed.

## Condensation Control

Wool generates heat when it absorbs moisture from the air. That energy is known as the heat of sorption and accounts for the warmth felt by wearers of woollen clothes in winter conditions. When the air is saturated with water vapour, wool absorbs some 40% of its dry weight in moisture, producing 960 kilojoules of heat energy for every kilogram of dry wool. This warmth is not noticeable inside the building but it acts to prevent condensation in loft cavities by maintaining the temperature above the dew-point in damp conditions.

## Energy Efficient and Totally Safe

The cleaning, air-laying and thermal bonding processing during the manufacture of all ThermoFleece insulation products consumes minimal energy. The products use only 14% of the embodied energy that is used to manufacture glass fibre insulation, therefore paying back its manufacturing energy cost seven times faster than glass fibre.

The product is harmless and can be handled without gloves or protective clothing. It is not irritating to the skin, eyes or respiratory tract and causes no discomfort to site workers during installation. Being a natural material any fibres which happen to reach the living space will present no hazard to health. The necessary insect proofing and fire resistance rating is achieved by the inclusion of naturally derived additives.

**SAFETY NOTE:** Lofts in old building can be very dusty, so it is wise to wear a breathing mask and protective clothing when installing the product in confined areas. Where ThermoFleece PB20 are being installed over existing fibrous insulation it is essential a dust mask is worn to prevent inhalation of existing dust particles.

## Extremely Durable

ThermoFleece PB20 fibre adapts to the shape of rafters and joists to provide a permanently tight fit. Properly installed, the product will retain its low density and thermal performance - with a life expectancy similar to that of the construction in which it is installed.

## Recyclable

At the end of its useful life, ThermoFleece PB20 insulation can be recycled for other environmentally friendly applications. The product contains no permethrin, pyrethroids, pesticides or formaldehydes.

## Carriage charges

### PLEASE READ THE NOTE BELOW BEFORE MAKING YOUR PURCHASE

ENSURE YOU ORDER ALL THE THERMAFLEECE PB20 REQUIRED FOR THE PROJECT AS THE FINAL CARRIAGE CHARGE WILL DEPEND ON THE TOTAL QUANTITIES PURCHASED. ACCORDING TO THE NUMBER OF PACKS ORDERED AND THE DELIVERY LOCATION, THE CARRIAGE CHARGE WILL BE CALCULATED AND CONFIRMED VIA FOLLOW-UP EMAIL. YOUR CREDIT CARD WILL NOT BE DEDUCTED TO THE NATIONWIDE BUILD SHOP LIMITED UNTIL YOU HAVE AGREED TO THE CARRIAGE CHARGE BY RETURN EMAIL.

## Delivery access

Orders may be delivered in a lorry of up to 28 tons. Therefore, it is important that your property is accessible by such vehicles. If there is a potential access problem please inform us via telephone or **contact us** button prior to placing your order so we can arrange suitable transport.

The ThermoFleecePB20 rolls are delivered as palletised packs only. Whole packs must be purchased – loose rolls are not available from **nbs**.



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ThermoFleece PB20 insulation products conveniently available from:

**nationwide**  
**build**  
**shop limited** [www.nbs-home.co.uk](http://www.nbs-home.co.uk)