

Furnishing Permutations

Curly Wool Out: Depending on use will vary from fine to strong fibre and from 10mm up.

Upholstery selection: Usually around 15mm

Mongolian (Tibetan) plates: Normally 48" x 24" (122cm x 61cm), silky curl wool 75mm – 100mm long.

Trimming grades: (See clothing permutations) medium fineness, 15mm to 25mm.

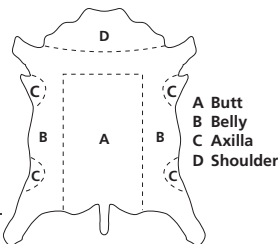
Long wools: Polished wool rug skins, 75mm – 100mm.

NEW 'Primitive' and pure breed UK character sheepskins: from 50mm – 100mm.

Shape of Sheepskin

Woolskins range from 4sq.ft to typically 7-9sq.ft. exceptionally 11/12sq.ft. and irregular in shape.

Wool and leather is not uniform over this area. E.g. The 4 axilla areas (armpits) are devoid of wool. In the belly area the wool is more open and shorter. In the neck and butt areas there is often a marked increase in wool density.

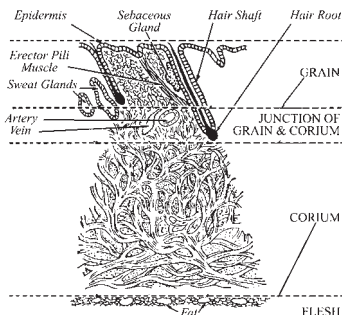


Stratigraphy of Leather

Under the microscope in cross-section there are 4 distinct layers. Uppermost is the epidermis; at the bottom a flesh or fat layer which can make up 30% of the live weight of the animal.

Wool fibre is composed of keratin protein cells, dead at the tip, living and easily destroyed at the root.

The 3rd layer down, Corium, is an intimately woven network of collagen. In turn composed of rope-like bundles of smaller fibrils, again made-up of bundles of sub-microscopic micelles.



Manufacturing Factors

Sheepskin is a NATURAL artefact. Each woolskin is unique.

Selection is a major skill. Cutting is almost always best done by hand using a sharp knife blade on the leather side (not the wool side!).

Sheepskin can easily stretch 10% of its 'resting' length. Even skilled cutting will only return a cutting value of 60-70% at best. Remember sheepskin has an irregular shape. In clothing and footwear sheepskin is usually wool side in. In furnishings/furniture it is usually used wool side out.

There are at least 10 commonly used seams and edge finishes. Many of which require the wool to be sheared (by electric) shears. Sheepskin are usually joined together using industrial overlocker or cup seam machines.

Facts and Figures

- In round terms the **UK Sheep population is 30+ million**. 14 million p.a. are slaughtered for the meat market. – Of which only 70,000 UK raw sheepskins are tanned by the few remaining UK sheepskin tanneries.
- About **2.4 million raw skins** are fellmongered (ie de-woolled) and most exported. Nearly 11.45 million sheepskins were exported 'salted' by the Hide Market. Turkey alone takes 8.8 million skins per annum most for coat production. Figures for imports of manufactured/finished/raw sheepskins are not available!

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SHEEPSKIN IN DESIGN



REAL SHEEPSKIN
ASSOCIATION

A pocket guide to the
Sheepskin Industry
for Designers

Sheepskin in Design

Definition

Real Sheepskin is defined as the wool-on leather coat of sheep tanned and finished as required.

Applications

The wide range of possible uses for sheepskin arise from:

- Breed characteristics
- Tanning
- Dyeing permutations
- Finishing techniques

Breed Characteristics

In the UK there more than **150 distinct sheep breeds**. Worldwide 1000+. Each with its own distinct physical features whether hairless, strong woolled to finest merinos, so fine that 5 of their fibres equals one human hair.

Selection for clothing starts with medium grades of wool not usually less than a 46's on the Bradford wool count (37 micron), where the lower the count, the coarser the wool. Less than 46 the wool is suited to carpet making.

Selection for upholstery use centres around 56's count (28 microns). For the record knitting wools need fine wools, around 70 count (19 micron). Compare this to Vicuna the finest natural fibre which is around 12 microns or Alpaca 15 microns.

Uniquely according to breed - and to varying degree - wool expresses itself as curls, crimps or lustre with grey and brown fibres or patches (think of the Jacob breed).

Today in the UK, Sheepskin is a by-product of the meat industry.

In Roman times and even through to the mid-20th century, sheep farming was driven by the wool textiles industry.

The conversion of raw skins into leather produces variations in weight as a result of age and breed of sheep. Recent use of enzymes can reduce substance by as much as 40%. This reduction process is particularly useful in producing sheepskin coat material. However it should be noted that over-reduced, the structural strength of the skin can be affected. This needs

especial consideration when using sheepskin in upholstery applications.

Unlike grain leather for example, the presence of wool prevents sheepskins being 'reduced' mechanically by shaving or splitting.

Dyeing

Wool and leather can be dyed separately or together to give contrasting or toning effects. **Most colour combinations are possible** but there are limits. Good penetration on sueded shearlings may be desirable but, for darker shades, there will be some 'pick-up' on wool if white wool is chosen.

Full, deep toning shades may show some colour transfer on pastel fabrics as fixation of heavy weight dye is difficult due to limited temperature ranges in dyeing, necessary to prevent leather shrinking.

Wool and suede (leather) colour fastness should be monitored and customers advised of limitations (white handkerchief rub test).

Finishes

Wool may be left at natural length or sheared down to any pile height (in practise 10mm is minimum if sheared by machine). The fibres can be left chunky, crimp and curly or ironed (straightened) to give a polished gloss.

The leather may be sueded or left roughly fleshed; coated with clear or pigmented finishes, matt or shiny or embossed or printed and, of course, dyed.

To stop wool required to be 'naturally' white, picking-up suede/leather dye or showing 'colour grin', the suede/leather is roller coated or sprayed rather than dyed.

Conclusion

Combine any of the above and the permutations are endless.

Clothing Permutations

Trimmings

Fox Lamb: 20 – 50mm natural, highly ironed wool, dyed with tipped options.

Beaver Lamb: Very fine merino wool, very highly ironed, sheared to 15 – 25mm.

Trimming: Medium fine wool, light iron or combed, sheared to 15 – 25mm.

Curlies: Selected crimp or curly natural wool, sheared to 12 – 20mm.

Sueded Shearling - Doubleface (D/f)

Lightweight: Spanish merinos or entrefinos.

Selected UK domestics: Light to mens weight, ironed or chunky wools.

USA's: Mainly mens weight, fine wool, with pronounced scarring on suede.

Australians: Light but ribby and often scarred suede, fine to curly wool.

French: Light to mens weight, suede prone to cackle, fine wool.

Dyed in variety of colours or printed or embossed.

Nappalan and Aviator

Aniline: i.e. Clear nappa finishes on any of the D/f selections.

Pigmented: heavier opaque finishes on dyed or natural D'f selections.

Aviation: 12 to 25mm, soft light to hard pigmented nappa permutations.

Curly Wool Out: eg. Gotland, natural curly grey to pearl wool fibre blend.

Slink Lamb: Natural pincurl, ultra lightweight, can be sueded.

Printed Wool Out

Beaver and Trimming selections, screen printed designs on wool.