

**SRI LANKA STANDARD 1019 : 1994**

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**GUIDELINES FOR GRADING OF WET  
SALTED RAW HIDES AND SKINS**

**SRI LANKA STANDARDS INSTITUTION**



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**SLS 1019 : 1994**

**Gr. 5**

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This standard does not purport to include all the necessary provisions of a contract.

**Sri Lanka Standard  
GUIDELINES FOR GRADING OF WET SALTED RAW HIDES AND SKINS**

**FOREWORD**

This standard was approved by the Sectoral Committee on Textiles, Clothing and Leather and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 1994-11-24.

The quality of raw hides and skins may differ considerably due to various influencing factors such as breed, feeding, living conditions, sex, age and health of the animals, substance (thickness of the hide or skin), appearance of hair, grain defects, flaying, curing, storage and transportation of hides and skins. The selection is generally based on the area, mass, substance, surface defects on grain and flesh sides and general appearance of the hide or skin. It is well recognized that no single test method is capable of evaluating hides and skins and the most accepted method of grading is to examine visually and by physical handling.

This standard has been prepared to provide a prompt and an easy method of assessing the quality of raw hides and skins.

In the preparation of this standard, the valuable assistance derived from the following publications is gratefully acknowledged :

- IS 9159 : 1979 Guidelines for grading of raw hides and skins.
- IS 12435 : 1988 Guidelines for grading of hides and skins on the basis of mass and size.

**1 SCOPE**

This standard prescribes guidelines for assessment of wet salted raw cattle hides and goat, sheep and calf skins by visual evaluation.

**2 REFERENCES**

- SLS 1013:1994 Code of practice for curing and preservation of hides and skins.
- SLS 1015:1994 Glossary of terms for leather.
- SLS 1020:1994 Method of trimming of raw hides

### 3 DEFINITIONS

For the purpose of this guideline, the definitions given in SLS 1015:1994 and the following definitions shall apply :

3.1 **badly shaped** : Shape not conforming to the standard configuration of hide or skin.

3.2 **croupon** : Area of a hide or skin excluding head, belly and shoulders.

3.3 **hair slip** : Slipping or loosening of the hair in hides or skins due to putrefaction.

3.4 **mange mite** : A parasite causing skin disease occurring in animals.

3.5 **offal** : The less valuable parts of a hide or skin such as head, shoulders and belly.

3.6 **red heat** : Red or pink coloured spots or patches which appear on the flesh side of salted raw hides and skins.

3.7 **warble** : Blemish caused by larvae of Hypoderma bovis, Hypoderma lineatum and Hypoderma crossi.

### 4 GRADING

4.1 Cow and buffalo hides and calf skins hides skins, cured and preserved as given in SLS 1013:1994 (see Note) in one lot shall be first classified according to mass given in Table 1.

The mass of cow and buffalo hides and calf skins shall be determined as given in 5.1.

#### *NOTE*

*Cured and preserved hides and skins should have a moisture content in the range 40 to 50 per cent by mass.*

4.2 Sheep and goat skins, cured and preserved as given in SLS 1013:1994 (see Note given under 4.1), in one lot shall be first classified according to length of backbone line (see Figure 1) given in Table 2.

The length of backbone line shall be determined as given in 5.2.

4.3 The hides and skins classified as in 4.1 and 4.2 shall be graded as given in Appendices A,B, or C as appropriate.

**TABLE 1 - Classification of cow and buffalo hides and calf skins on the basis of mass**

Sl No.	Classification	Mass of wet salted hide/skin , kg
i	Cow calf skins	1.5 to 5.0
ii	Cow hides	
	a) light	above 5.0 to 8.0
	b) medium	above 8.0 to 12.0
	c) heavy	above 12.0
iii	Buffalo calf skins	2.0 to 8.0
iv	Buffalo hide	
	a) light	above 8.0 to 12.0
	b) medium	above 12.0 to 16.0
	c) heavy	above 16.0

**TABLE 2 - Classification of goat and sheep skins on the basis of length of backbone line**

Sl No.	Classification	Length of backbone line, mm
i	Kid	up to 300
ii	Small	above 300 to 450
iii	Medium	above 450 to 600
iv	Large	above 600 to 800
v	Extra large	above 800

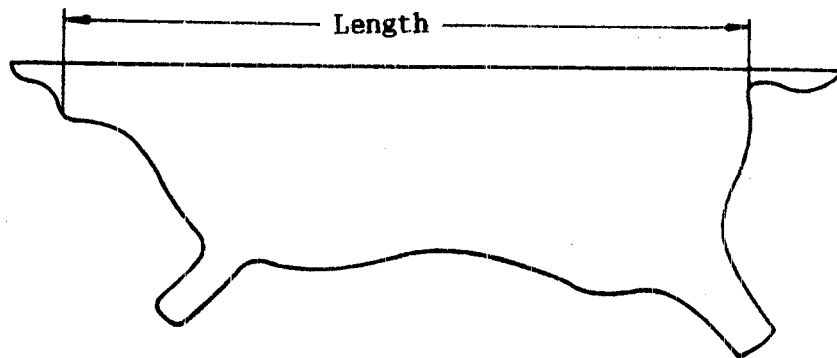
## 5 METHODS OF TEST

### 5.1 Determination of the mass of hides and skins

Open each hide or skin of the lot and shake vigorously knocking the flesh side down against a hard surface. The remaining salt is removed by brushing. The hides and skins are then weighed individually.

**5.2 Determination of the length of goat and sheep skins**

Fold the skin lengthwise and lay flat. Measure the length along the backbone from the root of the tail to the point where the skin of the front part of throat is the widest when determined at right angles to the fold (see Figure 1).



**FIGURE 1 - Measurement of length of backbone line of goat and sheep skins**



APPENDIX A  
GRADING OF CATTLE HIDES

Grade	Characteristic
1	Well shaped and trimmed as given in SLS 1020 hides from young or middle aged animals with no rib marks; having good substance; free from deep cuts, holes, various grain damages caused by parasitic, viral and helminthics, brand marks, bacterial damage, adhering flesh, fat and extraneous matter; having not more than 2 open and 4 blind warbles; and having minor defects in offal (not in croupon) compared to Grade 2.
2	Well trimmed hides as given in SLS 1020 of normal substance; having not more than 2 small flaying holes in the butt or not more than 4 holes in the hide (small holes in areas less than 80 mm from the edge and deep flay cuts not in the butt need not be counted); having not more than 6 visible warble holes, not more than 4 open and 8 blind warbles and showing slight hair slip but no putrefactive damage.
3	Well trimmed as given in SLS 1020 hides having normal substance; having not more than 4 small flay holes in the butt or not more than 8 holes in the hide (small holes in area less than 80 mm from the edge and deep flay cuts not in the butt need not be counted); having slight grain damage caused by various agents; having not more than 12 visible warbles holes, or not more than 8 open and 16 blind warbles; and showing slight hair slip but no putrefactive damage.
4	Hides not suitable for any good type of leather (rejection quality) . Further divided into Grades 4-A, 4-B, and 4-C.
4-A	Rejection quality, no brand marks other than the brand specified in the regulations issued under the Animals Act and no major grain damage.
4-B	Rejection quality, brand marks only on one side; no serious grain damage; red heat developed on the flesh side and badly shaped.
4-C	Rejection quality, brand marks on both sides; more grain damage than in Grade 4-B; red heat developed on the flesh surface and badly shaped.

**APPENDIX B**  
**GRADING OF COW AND BUFFALO CALF SKINS**

Grade	Characteristic
1	Well shaped and trimmed as given in SLS 1020 (head and feet trimmed); skins of good substance; having no flay cuts or holes (except 1 small hole or a few flay cuts in the belly area); and free from surface defects caused by parasitic, viral and bacterial diseases, brand marks, putrefaction etc.
2	Well shaped and trimmed as given in SLS 1020 (head and feet trimmed); skins of normal substance; having not more than 1 flay hole in the butt or up to 3 holes in the entire skin (small holes in the offal less than 40 mm from the edges need not be counted); having a few deep cuts; not more than 3 open and 5 blind warbles and showing slight hair slip but no putrefaction.
3	Well trimmed as given in SLS 1020 (head and feet trimmed) skins of normal substance; having not more than 2 flay holes in the butt or up to 6 holes in the entire skin (small holes in the offal less than 40 mm from the edges need not be counted); having a few deep flay cuts; not more than 6 open and 10 blind warbles; showing hair slip but no putrefaction; red heat developed on the flesh side and badly shaped.
4	Skins not suitable for any good type of leather (rejection quality) .

**APPENDIX C**  
**GRADING OF GOAT AND SHEEP SKINS**

Grade	Characteristic
1	Well shaped and trimmed as given in SLS 1020 (head and feet trimmed); skins of good substance; with not deep flay cuts or holes (except 1 small hole or a few cuts in the belly area); and free from surface defects caused by mange mites, pock marks, brand marks bacterial damage etc.
2	Well shaped and trimmed as given in SLS 1020 (head and feet trimmed); skins of normal substance; having not more than 2 small holes or a few flay cuts in the belly area; and having not more than 6 lesions or small scales caused by skin diseases, brand marks etc. (not in belly area).
3	Well trimmed as given in SLS 1020 (head and feet trimmed) skins of normal substance; having not more than 4 small holes or a few flay cuts in the belly area; having not more than 12 lesions or small scales caused by skin diseases; brand marks etc. (not in belly area); and showing hair slip but no putrefaction.
4	Skins not suitable for any good type of leather.



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