

AMENDMENT No.01 approved on 2018- 10-10 to SLS 2: 2016
SRI LANKA STANDARD SPECIFICATION FOR CLAY ROOFING TILES
(SECOND REVISION)

Page 6

3.30 plain tiles:

Add the following note at end of the definition of plain tiles.

“NOTE:

These tiles are generally rectangular, but can have a specially shaped tail (eg. fish-scale tiles with a rounded or sharp front edge).”

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5.2.1 Holding nibs

Delete the first paragraph and substitute the following

“When provided with holding nibs, each tile shall have either a continuous nib not less than 65 mm in base length or nibs each with a base of not less than 20 mm of length and 10 mm of width. Under tile may have a single nib with a base of not less than 20 mm in length and 10 mm in width.”

5.2.2 Fixing holes (Nailing holes)

Delete “5” in line one of first paragraph and substitute “4”, and

delete “4” in line two of first paragraph and substitute “3”.

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5.4.1.2 Uniformity of transverse profile

Delete “15mm.” at the end of line two of paragraph two and “15 mm for 200 mm length”.

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5.5.1 Mass of tiles per unit area of roof

NOTE given under the clause

Delete “both tiles (i.e. over and under tiles)” in line two and substitute “Plain tiles, Half Round -2 (Sihala) and both including over & under tiles of Half Round -1 (Spanish)”, and

delete “80 kg/mm²” in last line and substitute “90 kg/mm²”

5.6.1 Permeability

Delete the first sentence of existing paragraph and substitute the following.

“When tested for permeability as per the Method given in Appendix J, and examined at the end of six hours, no water shall have dripped from the underside of the any of the specimens.”

5.6.2 Efflorescence

Add the following note at end of the paragraph.

“NOTE:

Efflorescence test needs to be performed as agreed between the manufacturer and the buyer.”

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TABLE 3 – Requirements for transverse strength

Delete the existing table and substitute the following table.

Type of the tile (1)	Transverse strength (Minimum) for test span of 300 mm N			
	Wet transverse strength		Dry transverse strength	
	Average (2)	Individual (3)	Average (4)	Individual (5)
Plain tiles	500	400	600	500
Profiled tiles	1400	1200	1800	1600
Other tiles (other than Profiled tiles) except Plain tiles	1000	900	1400	1200

Page 13**TABLE 4 – Requirements for load bearing capacity**

Delete the existing table and substitute the following table.

Type of the tile (1)	Load bearing capacity (Minimum) kN/m			
	Wet transverse strength		Dry transverse strength	
	Average (2)	Individual (3)	Average (4)	Individual (5)
Over and under tiles of Half Round -1 (Spanish)	5.0	4.0	7.0	6.0
Ridge tiles	3.0	2.5	4.0	3.5

Page 23**C.4.1 Mass of tiles per unit area of roof**

Delete the existing formula given and substitute the following

$$M = \frac{m_{av}}{Ll} \times 1000$$

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Insert the Appendix J, after Appendix H

APPENDIX J**DETERMINATION OF WATER PERMEABILITY OF CLAY ROOFING TILES AND FITTINGS****J.1 Apparatus**

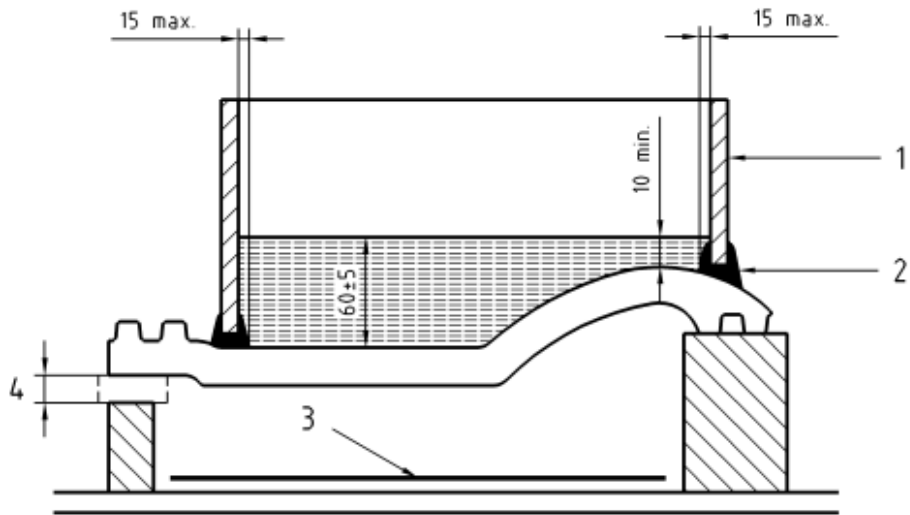
J.1.1 A frame as shown in Figures J-1 and J-2, in which internal dimensions correspond to put on the surface of the tile or around the tile, allowing test surface not less than 50 % of the total surface of the tile.

J.1.2 Suitable means for the transverse adjustment to level between the highest and lowest points on the surface of the test tile.

J.2 Test specimens

Each tiles in the sub sample

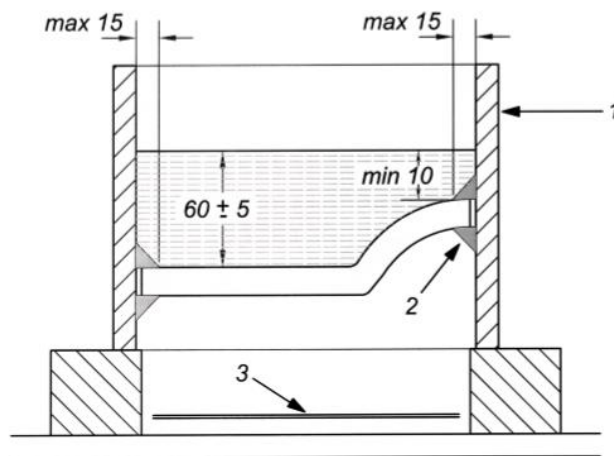
Dimensions in millimeters



Key

- 1 Frame
- 2 Mastic
- 3 Mirror
- 4 Adjust level (see J.4)

FIGURE J1 -Test Equipment



Key

- 1 Frame
- 2 Silicone
- 3 Mirror or measuring device

FIGURE J2- Frame around the tile

J.3 Preliminary treatment

Preliminary treatment consists of the following operations.

The tiles shall be immersed in tap water at room temperature for (48 ± 4) h.

The tiles shall then be dried at a temperature of (110 ± 5) °C until the difference between the two successive weighing at 24 h and cooled at room temperature for at least 4 h.

If the test is carried out on kiln fresh tiles, they shall, before their immersion in water for 48 h, be held for a period of time at room temperature.

J.4 Procedure

The tile to be tested is fitted with a frame on the surface or around the tiles as shown in Figure J-1 or Figure J-2.

The testing area on the exposed face of the tile does not include interlock, which is covered when in use. The frame shall be cleaned (e.g. with compressed air) before sealing with silicone or by other suitable means. The width of sealing band on the tile shall not exceed 15 mm.

The tile shall be supported in such a manner that it is horizontal within $\pm 5^\circ$.

In cases where the difference between the lowest and highest point on the surface of the tile is more than 50 mm tilt the tile in a transverse direction by adjusting the supports to ensure that the water level shall be, at the lowest point of the tile's exposed surface, 60 ± 5 mm and, at the highest point of the tile's exposed surface, 10 ± 5 mm.

Some types of tile will not have a point to correspond to this minimum water height, e.g. under and over tiles; in these circumstances, only the maximum depth applies.

Into the receptacle thus formed, pour tap water at 27 ± 2 °C continuously until the water level is 60 ± 5 mm above the lowest point of the tile. Once this level has been reached do not add any further water.

The assembly shall be stored in room with the temperature of 27 ± 2 °C and the relative humidity of 60 ± 5 %. The testing room shall be protected from draughts in such a way that any dripping is not disturbed.

After a period of not less than 06 hours examine the lower surface of the specimen for dripping of water droplets.

J.5 Expression of test results

Report the number of tiles, where the dripping of water droplets are observed.