

**AMENDMENT NO: 02 to SLS 452: 1979 approved on 2013-03-21.**

**SRI LANKA STANDARDS SPECIFICATION FOR CONCRETE NON-PRESSURE PIPES**

This Amendment No 2 incorporated erratum and replaced the existing Amendment No 1 dated 1987-07-02.

**Outer cover page**

Delete “BUREAU OF CEYLON STANDARDS” and substitute “SRI LANKA STANDARDS INSTITUTION”.

**Inner cover page**

Delete the address of the organization given under “Copyright Reserved” and substitute following address.

SRI LANKA STANDARDS INSTITUTION  
No. 17, Victoria Place,  
Elvitigala Mawatha,  
Colombo 08,  
Sri Lanka.

**Page 03**

**FOREWORD**

Delete “CS 102\*” in fifth line of the fourth paragraph of the **FOREWORD** (first paragraph of page 4) and substitute “SLS 102\*”.

**Page 04**

Delete the heading of clause 2, ‘Classification’ and substitute the following heading.

**2 CLASSIFICATIONS AND DEFINITIONS**

Incorporate sub-heading “**2.1 Classifications**” above the first paragraph.

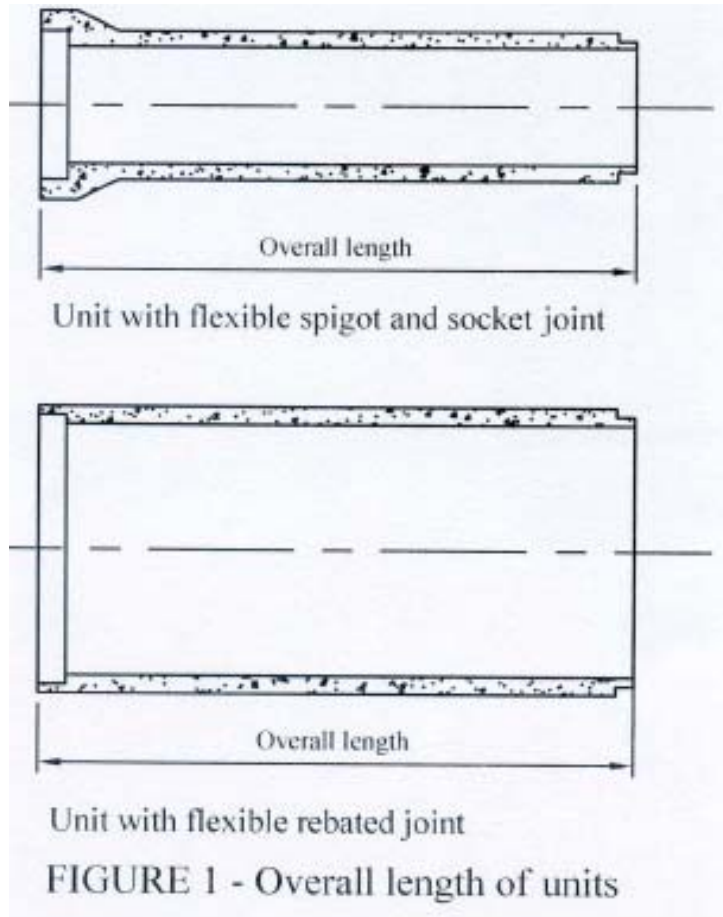
Add new sub clause “**2.2 Definitions**”

Add new definition “2.2.1 overall length” including Figure 1 and change the numbers of remaining figures accordingly.

**2.2.1 Overall length**

The overall length is a measurement as shown in Figure 1.

Add the following figure:



**Foot Note of the page**

Delete “\*CS 102”, and substitute “\*SLS 102”.

**Page 05**

**3.1 Cement**

Delete “CS 107\*” and substitute “SLS 107\*”

**3.2 Aggregates**

Delete the first sentence of clause 3.2 and substitute the following sentence.

Fine aggregates shall comply with the requirements of **SLS 1397\*\*** and coarse aggregates shall comply with the requirements of **BSEN 12620 †**

### 3.3 Concrete

Delete “SLS...†” in last line of the paragraph 3.3.1 and substitute “SLS 522††”

#### Foot note of page 5

Delete the existing foot notes and substitute the following.

\* *SLS 107 Ordinary Portland cement*

\*\* *SLS 1397 Fine aggregates for concrete and mortar*

† *BSEN 12620 Aggregate for concrete*

†† *SLS 522 Water for making concrete*

#### Page 06

3.3.4 Delete “Part 2 of SLS 262\*” and substitute “SLS 1144\*”

### 3.4 Reinforcement

Delete “CS 26\*\*\*” and substitute “SLS 26\*\*\*”

Delete “CS 7†” and substitute “SLS 7†”

#### Foot note of the page 6

Delete the existing foot notes and substitute the following.

\**SLS 1144 Ready –mixed concrete*

\*\**SLS 26 Plain steel bars for the reinforcement of concrete*

†*SLS 7 Cold drawn mild steel wire for the manufacture of wire nails*

#### Page 08

Delete “**given below**” in last line of the paragraph 4.4 and substitute “TABLE 1”

Add new title for the table “**TABLE 1-Minimum clear cover of concrete over all steel reinforcement**”

#### Pages 09 & 10

## 6 DIMENSIONS

Delete existing clause **6.1** and substitute the following.

**6.1** The dimensions of pipes and collars shall be as given in **6.2** and **Tables 2A** and **2B**.

In the case of pipes with spigot and socket ends, the minimum dimensions of spigot shall be as follows.

- For the pipes diameter up to and including 450 mm, the minimum dimensions of spigot and socket ends (see **Figure 2**) shall be as given in **Table 3A** and **3B**.
- For the pipes diameter above 450 mm, dimensions of spigot and socket ends shall be as agreed between the purchaser and the manufacturer.

In the case of pipes with internal flush joint with offset, the minimum dimensions (in inch) of joints (see **Figure 3**) shall be as given in **Table 5**.

In the case of minimum dimension specified in **Table 5**, the manufacturer shall inform the purchaser of the equivalent dimension in millimetres, the manufacturer is able to supply in a given normal size named in an enquiry or order.

The following tolerances shall be permitted for overall length, and internal diameter of pipes and or sockets.

<b>Dimensions</b>	<b>Tolerances</b>
a) Overall length	±1 % of the standard length
b) Internal diameter of pipes or sockets	
i) 300 mm (in <b>Table 1A</b> ) or 12 in (in <b>Table 1B</b> ) and under	+ 3 mm - 1.5 mm
ii) Over 300 mm (for <b>Table 1A</b> ) or 12 in (in <b>Table 1B</b> ) and up to 400 mm or 15 in	+ 6 mm - 3 mm
iii) Over 400 mm (in <b>Table 1A</b> ) or 15in (in <b>Table 1B</b> )	+ 1.5 % - 0.75 %

As regards the barrel wall thickness, the minimum values shall be as given below.

<b>Dimensions</b>	<b>Minimum thickness of the barrel</b>
c) Internal diameter of pipes or sockets	
i) 300 mm or 12 in and under	30 mm
ii) Over 300 mm or 12 in and up to 400 mm or 15 in	32 mm
iii) Over 400 mm or 15in	35mm

**Page 12**

Delete “TABLE 1B” in the title of the table and substitute “**TABLE 2B**”

In column 1 to 4 insert the unit **in**

In column 5 to 14 delete the unit kN per linear in and substitute **kN per linear m**

Delete Note below the table “TABLE and substitute “NOTE-Minimum length of the collar shall be 6 in for the pipes of diameter up to and including 15 in and 8 in for the pipes of diameter 18 in over.

**Page 13**

Delete the title “**Table 2 -Dimensions of class NP 1 pipes**” at the top of the page.

Add new title for the figure “**FIGURE 2-dimensions of spigot and socket ends of pipes**”

Delete “(Millimetre dimensions)”

Add new title for the first table “**TABLE 3A-Dimensions (in millimetre) of spigot and socket ends**”

Delete “(Inch dimensions)”

Add new title for the second table “**TABLE 3B-Dimensions (in inch) of spigot and socket ends**”

**Page 14**

Delete existing clause **6.2** and substitute the following as **6.2**

**6.2** Pipes of the following overall lengths shall be provided:

**TABLE 4-Overall length of the pipes**

Class	Internal diameter	Overall length (including socket)
NP 1	All diameters	1.0 m or 1.25 m
NP 2	Up to and including 300 mm	2.0 m
	350 mm to 400 mm	2.0 m,2.5 m, 3.0 m
	450 mm to 600 mm	2.5 m or 3.0 m
NP3	All diameters	2.5 m or 3.0 m

In the special case of spun pipes, overall length of pipes (see 2.2.1) shall be between 0.45 m and 5 m inclusive. The manufacturer shall inform the purchaser of the overall length of pipes that the manufacturer is able to supply in a given nominal size named in an enquiry or order.

**Page 15**

Delete the title “**TABLE 3 - Dimensions of internal flush joints (with offset) (inch dimensions)**” at top of the page.

Add new title for the figure “**FIGURE 3- Dimensions of internal flush joint with offset**”

Existing table below the figure 3 should be named as **“TABLE 5 - Dimensions (in inch) of the internal flush joints with offset “**

**Page 16**

Delete the word **“Table 1A or 1B”** in last line of the paragraph 8.2 and substitute **“Table 2A or 2B”**

**Page 17**

Delete the word **“Table 4”** in last line of the paragraph 9.1.2 and substitute **“Table 6”**

Delete the word **“Table 4”** in last line of the paragraph 9.2.2 and substitute **“Table 6”**

**Page 18**

Delete the word **“Table 4”** in last line of the paragraph 9.3.2 and substitute **“Table 6”**

Delete the word **“Table 4”** in 4<sup>th</sup> line and 10<sup>th</sup> line of the paragraph 9.3.3 and substitute **“Table 6”**

**Page 19**

Delete the word **“Table 4”** in the title of the table and substitute **“Table 6”**

**Page 20**

Delete **“(see Fig 1)”** in first line of the paragraph A.2.1.2 and substitute **“(see FIGURE 4)”**

**Page 21**

Delete **“(see Fig 1)”** in third line of the paragraph A.2.1.5 and substitute **“(see FIGURE 4)”**

**Page 22**

Delete the word **“(Fig 2)”** in third line of the paragraph A.2.1.6 and substitute **“(FIGURE 5)”**

**Page 23**

Delete the word **“(Fig 1)”** in the title of the figure and substitute **“(FIGURE 4)”**

**Page 24**

Delete the word “**(Fig 2)**” in the title of the figure and substitute “**(FIGURE 5)**”

**Page 25**

Delete the word “**(Fig.3)**” in last line of the paragraph A.3.1.1 and substitute “**(FIGURE 6)**”

**Page 25 & 26**

Delete the word “**(Fig.3)**” in last line of the paragraph A.3.2.1 and substitute “**(FIGURE 6)**”

**Page 32**

Delete the word “**(Fig.3)**” in third line of the paragraph A.2.1.6 and substitute “**(FIGURE 6)**”

**Page 33**

Delete “**CS 116\***” and substitute “**SLS 116\***”

Foot note of the page 33

Delete “**\* CS 116**” and substitute “**\* SLS 116**”