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**TENSILE PROPERTIES, RE-BEND TEST, CHEMICAL
COMPOSITION AND RIB GEOMETRY OF 12MM, 16MM &
25MM DIAMETER REINFORCEMENT STEEL BARS**
UM/MT/95/01/21

Date : 27th January 2021

Client : Mr. Isuru Ariyaratne,
QA/QC Engineer,
Sathuta Builders (Pvt.) Ltd.
Urban Regeneration Project – City of Colombo,
Negambo Road,
Kurunegala.

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OF 12MM, 16MM & 25MM DIAMETER REINFORCEMENT STEEL BARS**

Report No : UM/MT/95/01/21

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Urban Regeneration Project – City of Colombo,
Negambo Road,
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Client's reference : Letter dated 20th January 2021

Project : Urban Regeneration Project – City of Colombo (URP – CC)
Construction of Proposed Housing Project for Professionals at
Pannipitiya

Contract No. : URP-CC/01/P1/PC/2016/01

Item : RB 500 Grade Reinforcement Steel Bars. The details are given in the
following table.

Diameter	Batch No.	No. of Samples	Usage
12mm	05920 II - 12mm	04 Nos.	Superstructure All blocks
16mm	09120 II - 16mm	04 Nos.	
25mm	06620 II - 25mm	04 Nos.	

Tests Performed : Tensile Test, Rib Geometry, Re-bend Test and Chemical
composition as per BS 4449:2005 Standard

Results :

Table 1. Rib Geometry

Sample (Batch No.)	Transverse Rib Height (mm)		Rib Spacing (mm)		Rib Inclination (°)		Longitudinal Rib Height (mm)
	Actual	Specified values as per the standard	Actual	Specified values as per the standard	Actual	Specified values as per the standard	
05920 II - 12mm	0.9	0.36 ~ 1.80	8.0	4.8 ~ 14.4	69	35 ~ 75	0.8
09120 II - 16mm	11.5	0.48 ~ 2.40	11.5	6.4 ~ 19.2	68	35 ~ 75	0.8
06620 II - 25mm	17.5	0.75 ~ 3.75	17.5	10.0 ~ 30.0	69	35 ~ 75	1.4

