



DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

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**TENSILE PROPERTIES, RE-BEND TEST, CHEMICAL
COMPOSITION & RIB GEOMETRY OF 10MM, 12MM, 16MM,
20MM & 25MM DIAMETER REINFORCEMENT STEEL BARS**

UM/MT/96/01/21

Date : 27th January 2021

Client : Mr. H.G.T. Nalaka Wickramasinghe,
Senior Site Manager,
Sathuta Builders (Pvt.) Ltd.
Kottawa Housing Project,
Kottawa.

Department of Materials Science and Engineering
University of Moratuwa, Moratuwa,
Sri Lanka.

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Report No : UM/MT/96/01/21

Client : Mr. H.G.T. Nalaka Wickramasinghe,
Senior Site Manager,
Sathuta Builders (Pvt.) Ltd.
Kottawa Housing Project,
Kottawa.

Client's reference : Letter dated 20th January 2021

Project : Design, Construction & Finance of Housing Project at
Kulasewanawatta, Kottawa.

Contract No. : URP-CC/02/CON/2016/05

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

Diameter	Sample Code	No. of Samples	Manufacture
10mm	UDA/SB/KOT/BLOCK B/10mm	05 Nos.	CAPTAIN
12mm	UDA/SB/KOT/BLOCK B/12mm	05 Nos.	CAPTAIN
16mm	UDA/SB/KOT/BLOCK B/16mm	05 Nos.	CAPTAIN
20mm	UDA/SB/KOT/BLOCK B/20mm	05 Nos.	CAPTAIN
25mm	UDA/SB/KOT/BLOCK B/25mm	05 Nos.	CAPTAIN

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

Results :

Table 1. Re-bend Test

Sample	Re-bend Test
10mm bar	Pass
12mm bar	Pass
16mm bar	Pass
20mm bar	Pass
25mm bar	Pass

