



DEPARTMENT OF CHEMICAL ENGINEERING

University of Engineering and Technology, G.T. Road, Lahore, 54890 (PAKISTAN)

Ref. No. Chem. Engg B-19

Dated: 27/07/2017


Lt.Col.(R) Muhammad Farooq Khan
Resident Engineer,
EE KTDC, Karachi Thatta Dual Carriageway Project.

Subject: Testing of Elastomeric Bearing Pad Sample (Interbuna SL Spain)
(Karachi-Thatta Dual Carriageway Project:)


With reference to your letter No. 437/RE/EE/KTDC dated 08.07.2017 on the subject cited above. The result of provided sample is as under: (Sample received by hand from Mr. Muhammad Abdul Heyat Material Engineer.)

Description / Test	Unit	Result	Standard Method (ASTM)
Ozone resistance, 20% strain, 100 hrs @38°C ± 1°C (except 100 ±20 Parts per 100,000,000)	observation	No deformation No cracking (satisfactory)	ASTM D-1149 Rubber deteriorate Cracking in an ozone controlled
Low temperature brittleness, 5 hrs. @ - 40°C	observation	No Brittle No shape change	D-736
Low temperature stiffness Young's Modulus @35°C	Kg/cm ²	277	D-797
Compression set, 22 hrs. @ 67°C	%	17.9	D-395 (Method B)
Tear strength	kg/cm ²	25.6	D-624 (Die C)
Shear Modulus	kg/cm ²	8.12	D-4014 Annexure A1
Steel Plates	Qty	05	-
Thickness Of Plates	mm	03	-

Description	Unit	Before aging	After aging @100°C, 70 hrs.	Change	Standard ASTM
Hardness (Shore A)	Points	60	64	4	D-2240
Tensile strength	Kg/cm ²	201	183	-8.96%	D-412
Elongation at break	%	483	432	-10.56%	D-412


(Fayyaz A. Kirmani)
Supervisor




(Prof. Dr. Ing. Naveed Ramzan)
Chairman

Note: This test report is based on sample provided by the client. As sampling has not been performed by the Chemical Engineering Department. The authenticity of sample lies with the client. After completion of the report the sample will be reserved for fifteen days until negotiated otherwise. Non-negotiable results can not be challenged.