

NELTEX

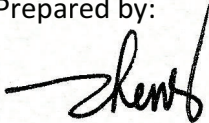
DEVELOPMENT CO., INC.

CERTIFICATION

This is to certify that NELTEX Development Co. Inc. is producing Neltex Saniguard 8055 High Impact uPVC Sanitary Pipe Series 1000, with sizes 57mm, 82mm and 107mm, and with effective length of 3m.

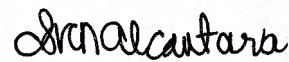
Neltex Saniguard 8055 High Impact uPVC Sanitary Pipes are inspected and tested in conformance to ASTM D2729: Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

Prepared by:



Maricel L. Rostata
QA Supervisor

Approved by:



Cecille N. Alcantara
QA/TD Manager

TECHNICAL SPECIFICATIONS

PRODUCT	Neltex Saniguard 8055 High Impact uPVC Sanitary Pipe Series 1000
REFERENCE STANDARD	ASTM D2729 Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings

A. DIMENSION

NOMINAL PIPE SIZE	OUTSIDE DIAMETER (mm)	WALL THICKNESS (mm)	EFFECTIVE LENGTH
57mm	57.00 - 57.30	2.540 - 2.994	3m
82mm	82.35 - 82.75	3.700 - 4.270	3m
107mm	106.84 - 107.28	3.810 - 4.391	3m

B. PHYSICAL PROPERTIES

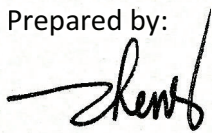
PROPERTY	STANDARD REQUIREMENT	TEST METHOD
Longitudinal Reversion	5% maximum after 1 hour at 150 ^o C	ISO 2505 Thermoplastics Pipes - Longitudinal Reversion
Resistance to Acetone	No sign of delamination or disintegration after 2 hours of immersion	ISO 3472 Unplasticized Polyvinyl Chloride (PVC) Pipes - Specification and Determination of Resistance to Acetone
Resistance to External Blows (Impact Test)	True Impact Rate (TIR) shall not exceed 10% where TIR = total number of breaks / total number of blows	ISO 3127 Thermoplastics pipes - Determination of Resistance to External Blows - Round-the-clock Method
Flattening	No evidence of splitting, cracking or breaking when flattened to 40% of the outside diameter	ASTM D2241 Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

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PROPERTY	STANDARD REQUIREMENT	TEST METHOD
IZOD Impact Strength	34.7 J/m minimum	ASTM D256 Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics
Tensile Strength	34.5 MPa minimum	ISO 527-1 Plastics - Determination of Tensile Properties

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LABORATORY TEST RESULTS

PRODUCT: Neltex Saniguard 8055 High Impact uPVC Sanitary Pipe Series 1000
 REFERENCE STANDARD: ASTM D2729

A. Dimension

NOMINAL PIPE SIZE	OUTSIDE DIAMETER (mm)		WALL THICKNESS (mm)		REMARKS
	STANDARD	RESULT (mean)	STANDARD	RESULT (mean)	
57mm	57.00 - 57.30	57.15	2.540 - 2.994	2.767	Passed
82mm	82.35 - 82.75	82.60	3.700 - 4.270	3.985	Passed
107mm	106.84 - 107.28	107.10	3.810 - 4.391	4.101	Passed

B. Longitudinal Reversion - ISO 2505

NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT (mean)	REMARKS
57 - 107mm	5.00% maximum after 1 hour at 150°C	3.10%	Passed

C. Resistance to Acetone - ISO 3472

NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT	REMARKS
57 - 107mm	No sign of delamination or disintegration after 2 hours of immersion	No delamination or disintegration	Passed

D. Resistance to External Blows (Impact Test) - ISO 3127

NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT	REMARKS
57 - 107mm	True Impact Rate (TIR) shall not exceed 10% where TIR = total number of breaks / total number of blows	0%	Passed

E. Flattening - ASTM D2241

NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT	REMARKS
57 - 107mm	No evidence of splitting, cracking or breaking when flattened to 40% of the outside diameter	No sign of splitting, cracking or breaking even when flattened to 100% of the outside diameter	Passed

F. IZOD Impact Strength - ASTM D256

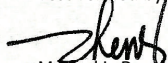
NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT (mean)	REMARKS
57 - 107mm	34.7 J/m minimum	112.26 J/m	Passed

F. Tensile Strength - ISO 527-1

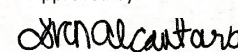
NOMINAL PIPE SIZE	STANDARD REQUIREMENT	RESULT (mean)	REMARKS
57 - 107mm	34.5 MPa minimum	59.6 MPa	Passed

We hereby certify that the above physical and mechanical laboratory analysis are true and correct as contained in the quality records of the company.

Test verified by


 Maribel L. Rostata
 QA Supervisor

Approved by:


 Cecille N. Alcantara
 QA/TD Manager