



SIRIM QAS International Sdn. Bhd. (Company No. 410354-X)
No. 1, Persiaran Darul Menteri, P.O. Box 7035, Section 2
40911 Shah Alam, Selangor Darul Ehsan, Malaysia
Tel: 03-55445853 / 55445854
Fax: 03-55445855

TEST REPORT

REPORT NO : 2009CB2758

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Applicant : BINA PLASTIC INDUSTRIES SDN. BHD.
Lot 4844, Balakong New Village Ind. Estate,
43300 Seri Kembangan,
Selangor Darul Ehsan.

Manufacturer : BINA PLASTIC INDUSTRIES SDN. BHD.
Lot 158, Jalan Permata 1,
Arab Malaysian Industrial Park,
71800, Nilai,
Negeri Sembilan Darul Khusus.

Product : HDPE SUB - DUCT

Reference Standard / Method of Test : ASTM D 2412-02 : Standard Test Method for Determination of External Loading Characteristics of Plastics Pipe by Parallel-Plate Loading

Description of Sample : Two sets of HDPE Sub-Duct were received for testing.
Nominal Diameter : i) \varnothing 100 mm
ii) \varnothing 150 mm
Brand : BINA

Date Received : 12th August 2009

Job No./Ref.No. : J20095042730 / SQAS / CCST / T.REC / PCL / 09

Issued Date : 02 SEP 2009

Approved Signatories

(ABDUL RAZAK MAT JAYA)
Senior Technical Executive



(M RAJA NOR SIHA RAJA ABDUL HANAN)
Group Leader
Civil & Construction Section
Testing Services Department

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TEST RESULT

PIPE STIFFNESS AT 30 %

Sample : HDPE Sub - Duct
Nominal size : \varnothing 100 mm
Test Method : ASTM D 2412-02 : Standard Test Method for Determination of External Loading Characteristics of Plastics Pipe by Parallel-Plate Loading

Pipe Stiffness at 30%

Sample ref.	Internal diameter (mm)	Length (mm)	Load (N) 30 % deflection	Pipe stiffness (kPa)	Observation
1	100.8	147.5	811.1	26.8	No cracking, delamination or rupture was observed.
1	101.7	153.8	927.0	30.4	

Average : 28.6 kPa



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PIPE STIFFNESS AT 30 %

Sample : HDPE Sub - Duct
Nominal size : \varnothing 150 mm
Test Method : ASTM D 2412-02 : Standard Test Method for Determination of External Loading Characteristics of Plastics Pipe by Parallel-Plate Loading

Pipe Stiffness at 30%

Sample ref.	Internal diameter (mm)	Length (mm)	Load (N) 30 % deflection	Pipe stiffness (kPa)	Observation
1	150.9	144.6	785.1	17.3	No cracking, delamination or rupture was observed.
2	150.6	151.2	858.2	19.0	
Average : 18.2 kPa					



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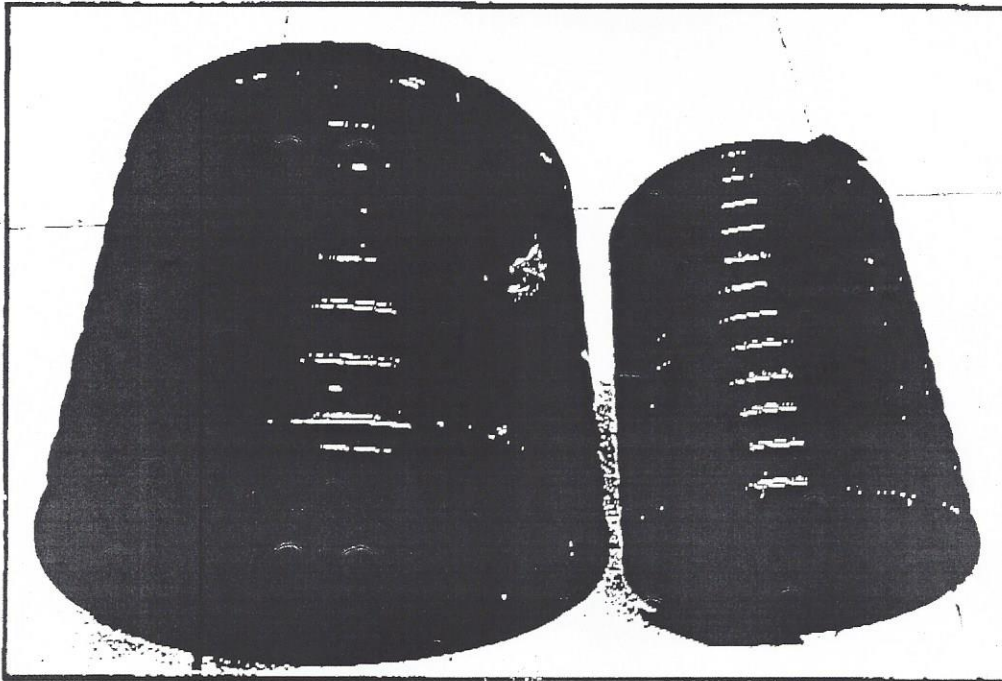


Photo 1 : Shows samples submitted for test (Brand : BINA)



02 SEP 2009