Technical Data for Waffle System

Technical Data

Material	Polypropylene
Size	2 m x 5.75 m
Approximate Wight	600 gm/sq.m
Thickness	aprox. 4 mm
Water absorption (ASTM 1004)	nil
Resistance to 60% NaOH (ASTM D 543)	not affected
Resistance to 30% NaOH (ASTM D 543)	not affected
Resistance to 30% H2SO4 (ASTM D 543)	not affected
Resistance to 10% HCI (ASTM D 543)	not affected
Resistance to mineral oils (ASTM)	not affected
Liner dimensioning change due to accelerated aging (ASTM D 1204)	nil
Resistance to puncture (BS EN ISO 12236:2006)	≥ 1500 newton





Specification

Various sizes, semi flexible, flexible polypropylene based board, double layered with 4mm integrated vertical support spacers at 4mm intervals.

Strength

CARTONAL N-1500 board is especially load & puncture resistant. It is engineered to resist puncture at a minimum 1500 newton (BS EN ISO 12236:2006). (See back page for Specs)

Flexibility

CARTONAL N-1500 differs from any other materials used for ribbed slab concrete systems. CARTONAL N-1500 board enjoys flexibility as well as rigidity to shape edges & corners.

Resistance to Chemicals

CARTONAL N-1500 boards are not affected by mineral oils, solvents, acids, bases, and salts that are used with concrete casts.

Sustainable Material

- * LEEDS Credit 4- Material & Response *MR" Post Industrial Material potential 1 point.
- * All Cartonal products are made of inert plastic material
- * Our products are 100% recyclable
- * Our electricity generation technology is rated EPA Tier 2 and EU Stage 2 exhaust emission level.

Website: www.cartonal.net



Methodology of Application

- Bending the plastic sheet to the requested sizes.
- Cutting the Edges on request sizes for tops & bottoms.
- Fixing the sheet on the marines plywood sheet.
- Taping tops & bottoms with ducting tape.
- This is followed by the work of other contractors to reach the casting stage.

Technical Data

- Specimen ID: 10-208879/1
- Diameter of Specimen (mm): 150
- Push Through Force (N): 1572.0
- Push through Displacement (mm): 57.30
- Type of failure: Satisfactory
- Specimen ID: 10-208879/2
- Diameter of Specimen (mm): 150
- Push Through Force (N): 1816.0
- Push through Displacement (mm): 66.30
- Type of failure: Satisfactory
- Specimen ID: 10-208879/3
- Diameter of Specimen (mm): 150
- Push Through Force (N): 1872.0
- Push through Displacement (mm): 67.50
- Type of failure: Satisfactory

AVERAGE=

- Push through force: 1753.3
- Push through Displacement (mm): 63.70

STANDARD DEVIATION=

- Push through force: 159.516
- Push through Displacement (mm): 5.57

Extracted from Material lab UAE

Polypropelene plastic