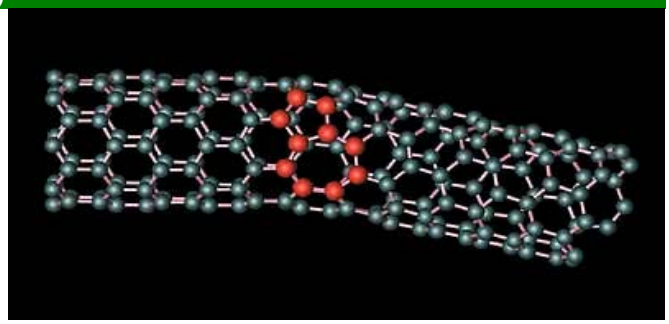
REF: 09 DESIGN FEATURES

FEATURE 1: SHEET MOULDING COMPOUND (S.M.C.)

Sheet moulding compound or sheet moulding composite is a ready to mould fibre reinforced polyester material primarily used in compression moulding. The sheet is being provided in rolls up to 400kg.

Compression moulding is a method of moulding in which the moulding material, generally preheated, is first placed in an open, heated mould cavity. The mould is closed with a top force or plug member, pressure is applied to force the material into contact with all mould areas, and heat and pressure are maintained until the moulding material has cured.



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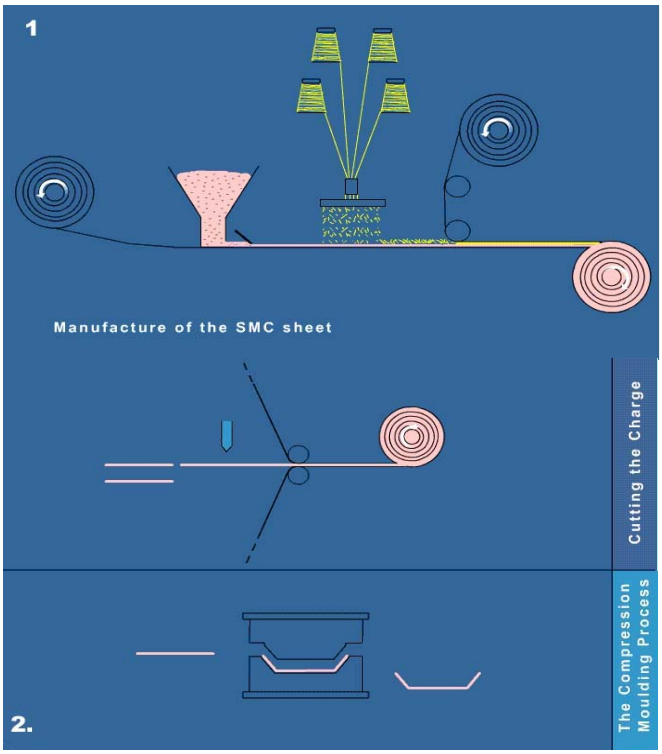

The process employs thermosetting resins in a partially cured stage, either in the form of granules, putty-like masses, or preforms. Compression moulding is a high-volume, high-pressure method suitable for moulding complex, high-strength fiberglass reinforcements.

Advanced composite thermoplastics can also be compression molded with unidirectional tapes, woven fabrics, randomly orientated fiber mat or chopped strand. The advantage of compression moulding is its ability to mould large, fairly intricate parts. Compression moulding produces fewer knit lines and less fiber-length degradation than injection moulding.
This methodology is used for most of rubber products.

Produced by Omnia Tech s.r.l.Via V. Monti, 1120124 MILANO, Italy, Modula®*city* is an extraordinary technique, making the dream of our Modular Home come true.

The characteristics of their innovative S.M.C. allow for both an elevated mechanical and thermal resistance (both heat and cold), a fine tolerance to chemical and atmospheric agents. Having found extensive applications automobile and aeronautical aircraft industries, it appears that S.M.C. have finally found its recognition in construction and sustainabilty, and not a moment too soon.

FEATURE 2: RAINWATER COLLECTION AND TREATMENT

Surface water can easily be utilized in this EcoHouse design to reduce the domestic water consumption expenses. Being earth-sheltered, the water tank is protected from extremely low or high temperatures. The earth falls around the tank are profiled in such a way as to funnel the rainwater into the tank.