M.M. S.R.L.
Fiberglass Reinforced Polymer
gratings and structures

Via Antonio Zanussi, 300/302
33100 Udine - Italy
Cap. Soc. EURO 100.000 i.v.

P.Iva / C.F. 00477620306
Reg. Imp. UD 00477620306
R.E.A. UD-138461

ph. +39.0432.522970
fax +39.0432.522253
info@mmgrigliati.it

WALKWAYS AND PARAPETS IN WASTE TREATMENT AREAS

LOCATION

Biotreatment centre certified according to the environmental management standard (ISO 14001), in full compliance with international rules. Composting is performed in the site with a potential capacity of 34,000 tons per year.

CLIENT

Company providing water and waste management services and other regional services.

LOCATION	PADOVA (ITALY)
USE	WALKWAYS AND ELEVATED PASSAGES
PRODUCT	PULTRUDED PROFILES AND GRATINGS TYPE SCH 38/30_IFR

OBJECTIVE

The materials to be composted such as lignocellulosic residues, sewage sludge and fruit and vegetable waste arrive to the site and a quality compost is then produced for use in the farming or floriculture sector. The process phases are the arrival of lignocellulosic materials, their storage and shredding and indoor mixing of sludge with lignocellulosic residues. An accelerated bio-oxidation phase follows. It takes place indoor, in a depressurized factory building equipped with an air suction and treatment system. Compost heaps are left to mature outdoor. The refining phase follows. Here elevated walkways are installed, over air suction and treatment hoses. The required characteristics are very low maintenance, modular construction and lightness of materials, resistance to humidity and potential seepage of pollutant gases and liquids.

SOLUTION

Carried out an assessment of existing structures M.M. designed the new structures using SCH 38/30_IFR gratings and pultruded profiles which can be installed without interrupting manufacturing operations. The prefabricated structures were preassembled according to the UNI EN ISO 14122 standard and Legislative Decree 81/2008 in order to reduce intervention in the site to a minimum. The structure of coverings ensures the required bearing capacity under concentrated load conditions, limits weight and ensures slip resistance according to the DIN 51130 standard, R13 V10 level. The intrinsic properties of the materials make them durable and prevent any decline in their performance even in aggressive environments. The material used is dielectric; as a result, M.M. structures and walking surfaces were certified as excellent insulators according to the EN 61340-2.3 and IEC 61340-4-5 electrical safety standards.