

# HUESKER INCOMAT® DATA SHEET

## DOUBLE LAYER WOVEN GEOTEXTILE GROUT FILLED EROSION / SEALING MATTRESS

Incomat® grout mattresses are used for erosion protection in hydraulic engineering as they have a high resistance to hydraulic loads, readily adapt to the ground profile and have a high UV and abrasion resistance giving them a long service life. The mattresses consist of two high-strength polyamide and/or polyethylene woven layers connected together by interweaving or the use of spacers, this forms a 50mm to 600mm space between the two layers so that they act as a flexible formwork

Incomat® mattresses are filled on site with a pumped cement grout and can be installed above or below water.

Depending on their layout and structure, Incomat® mattresses come in two basic types, either permeable, flexible or rigid with a non-uniform thickness, or impermeable, rigid and with a constant thickness.

Incomat® is an economic erosion protection system with many applications in land improvement, hydraulic engineering and coastal protection and can be supplied in various versions tailored to suit a particular application.

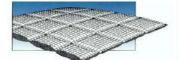
#### **Typical applications:**

- Erosion protection of river, canal, and dykes banks and groins against wave attack and flowing water.
- Sealing of watercourses, canals and lagoons
- Erosion protection in the intertidal zone
- Protection of inshore / offshore pipelines and structures
- Freshwater lagoons and ponds "Green" lining.

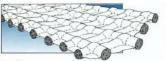
PRODUCT DATA			FLEX 20.108	FLEX 20.112	FLEX 20.116	FLEX 20.118	STAN 20.108	STAN 20.112	STAN 20.118	CRIB 10.100	CRIB 10.200	FP C 60.148	FP C 60.148/20
MECHANICAL	STD.	UNIT											
Ultimate tensile strength* Longitudinal Transverse	EN ISO 10.319	kN/m	≥ 45 ≥ 25	≥ 50 ≥ 50	≥ 50 ≥ 50								
Strain @ nominal tensile strength Longitudinal Transverse	EN ISO 10.319	%	≤ 20% ≤ 20%										
Binder strength		daN	40	40	40	40	40	40	40				
HYDRAULIC													
Pore size O <sub>90</sub> per layer of the fabric		μm	250	250	250	250	250	250	250	250	250		
Permeability index normal to the plane of a single layer of fabric.*	EN ISO 11058	I/m <sup>2</sup> /s	15	15	15	15	15	15	15	15	15	24	24
PHYSICAL													
Maximum thickness after filling		mm	~ 100	~ 140	~ 180	~ 120	~ 100	~ 140	~ 200	~ 100	~ 200	~ 100	~ 200
Geotextile weight	EN ISO 9864	g/m <sup>2</sup>	~ 400	~ 400	~ 400	~ 400	~ 400	~ 400	~ 400	~ 360	~ 360	~ 380	~ 380
Incomat raw material Longitudinal Transverse			PA PE	PES PES	PES PES								
PACKAGING													
Roll width Roll length	NA	m	5.0 100	5.0 200	5.0 200	5.0 100	5.0 100						

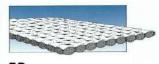
#### PRODUCT NOTES

- The information listed in this data sheet is subject to periodic review and could be changed without notice.: Data revised 03 / 2007
- Incomat mattresses are manufactured according to ISO 9001 quality assurance procedures.
- All values quoted are mean unless otherwise stated (tolerance +/- 10%).
- = for each layer



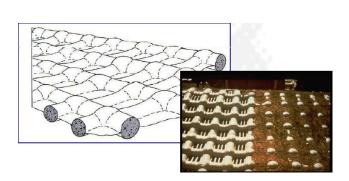


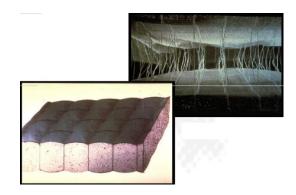




### Flex

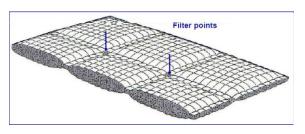
- Standard
- Incomat® Standard for sealing and erosion protection of settlement-free underlying soils
- Incomat® Flex for high hydraulic loads. They are permeable mattresses that can accommodate settlement
- Incomat® Crib grid mattresses that can support vegetation for low hydraulic loads
- Incomat® FP C Filter-point mattresses, water-permeable, rigid mattresses for medium hydraulic loads



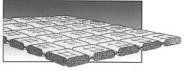


Incomat® Crib

Incomat® Standard







Tubular mat with drains for low to medium hydrostatic loads.

Mat with slab construction, and two-dimensional pliability for very soft subgrades.

Incomat® FP C

Incomat® Tube

Incomat® Slab

NOTE: Special **Incomat®** profiles and thickness / weights can be manufactured to order to suit any hydraulic load or ground conditions, eg; **Incomat®** Standard can be supplied up to 600mm thick with a weight of 1,200kg/m<sup>2</sup>.







The information contained herein is furnished without charge or obligation.

No responsibility is accepted for any change in product properties due to environmental influences and or improper application or handling.

