

ZANELLI	PRODUCT DATA SHEET	M-PRO-20 REVISION 1 DTD 28.05.2002
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PRODUCT NR.	NAME	CERTIFICATION	REV./DTD
8	ZL	Quality System Certificate to UNI EN ISO 9001:2000	Rev.8 del 24/09/07

DESCRIPTION

Heat shrinkable irradiation cross-linked polyethylene sheet clad with polyolefinic heat sensitive adhesive, suitable for the anti-corrosion protection of buried steel pipeline .
Suitable for installation in ambient temperature from – 10°C to + 30°C and on pipelines operating at service temperature not exceeding +30°C.
Steel surface treatment: wire brushing to St 2 standards (SIS-SSPC)
Preheating temperature not required: preheat only to take-off steel surface moisture
Compatible with coating in polyethylene, tar, fusion bonded epoxy, coal-tar enamel

VISUAL AND DIMENSIONAL CONTROL

COLOR	BLACK
WIDTH	AS SPECIFIED – TOLERANCE - 5 / + 20 mm.
TOTAL THICKNESS(*)	AS SPECIFIED – TOLERANCE - 0 / + 0,3 mm.
BUILT-IN PATCH	UPON REQUEST
EDGE-CUT	UPON REQUEST
MARKS	"ZANELLI – ITALY " ZL + TRACEABILITY CODE
PROTECTIVE FOIL	REQUIRED

PROPERTIES OF THE BACKING

TITLE	SPECIFICATION	UNIT	VALUES	TOLERANCES
YIELD TO BREAK	EN 12068 app.A (M-PRO-29 PROVA N.12)	N/mm2	15	min.
ELONGATION	EN 12068 app.A (M-PRO-29 PROVA N.12)	%	400	min.
HEAT SHOCK	ASTM D-2671	VISUAL	no defects	-

PROPERTIES OF THE ADHESIVE

TITLE	SPECIFICATION	UNIT	VALUES	TOLERANCES
DENSITY	ASTM D-792	g/cm3	1,18	+/- 0,05
SHEAR STRENGTH AT +23°C	EN 12068 app. D (M-PRO-29 PROVA N.4)	N/mm2	0,03	min.
SHEAR STRENGTH AT +30°C	EN 12068 app. D (M-PRO-29 PROVA N.4)	N/mm2	0,02	min.
SOFTENING POINT	ASTM E-28 (M-PRO-29 PROVA N.6)	°C	100	+ 10
VISCOSITY	ASTM D-4402	cPs	110.000	+/- 20.000

PROPERTIES OF THE INSTALLED SLEEVE

TITLE	SPECIFICATION	UNIT	VALUES	TOLERANCES
ADHESION AT +23°C	EN 12068 app. C (M-PRO-29 PROVA N.3)	N/mm	0,3 (**)	min.
ADHESION AT +30°C	EN 12068 app. C (M-PRO-29 PROVA N.3)	N/mm	0,2	min.
IMPACT RESISTANCE	EN 12068 app. H	1,5 Kgm	pass	-
DIELECTRIC INSULATION	DIN 30672	KV 17,5	pass	-
CATHODIC DISBONDMENT at +23°C x 28 days	EN 12068 app. K	cm/radius	0,8	max

(*) UN-RECOVERED

(**) 0,2 N/mm when adhesive thickness is below 1,0 mm.