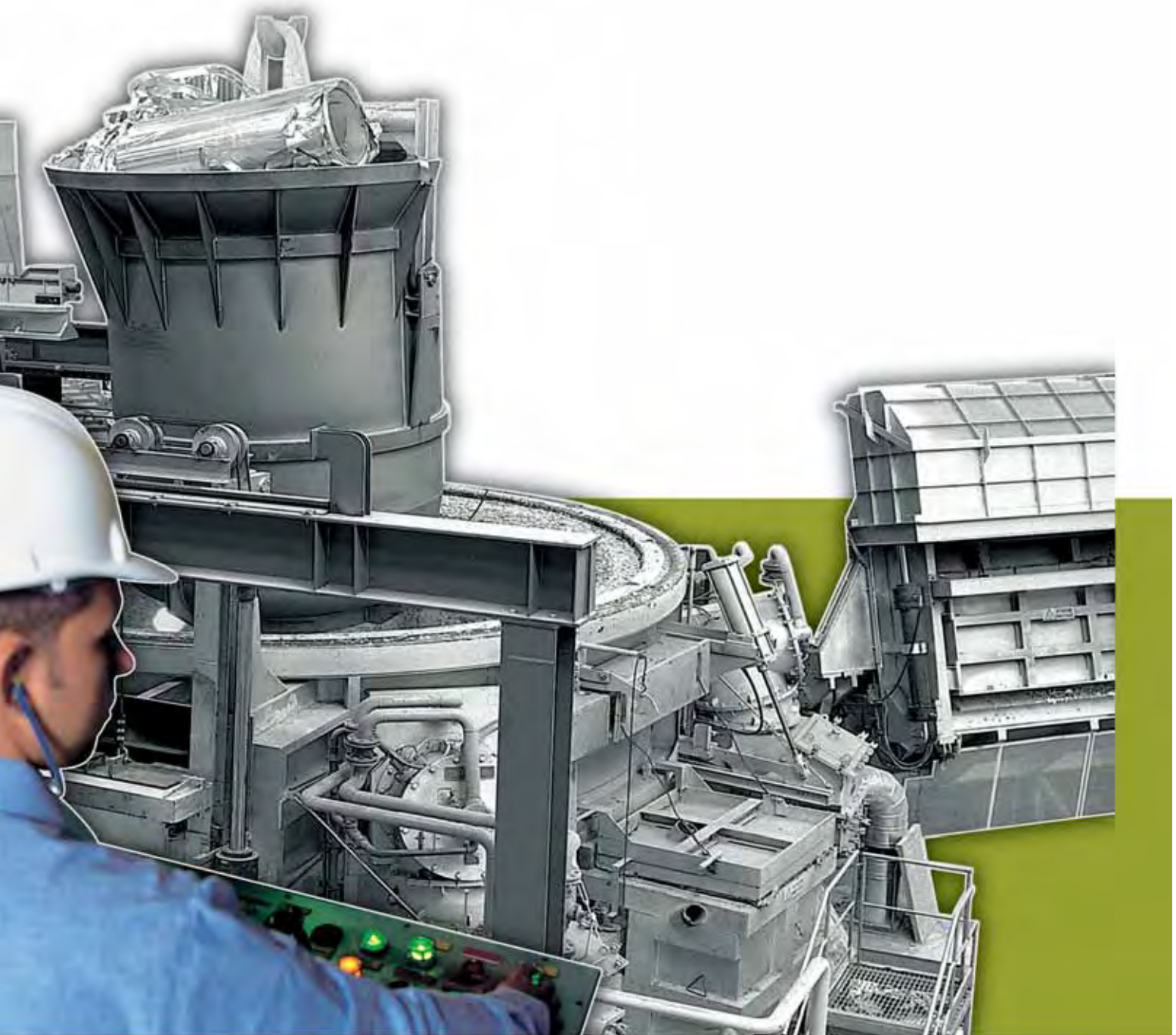


ROLL[®]

Prepainted aluminium
rolled products
for rollershutters





Novelis is the world leader in aluminum rolling, producing an estimated 19 percent of the world's flat-rolled aluminum products. They are the N°. 1 rolled products producer in Europe, South America and Asia, and the N°. 2 producer in North America. Novelis is globally positioned, operating in 11 countries with approximately 12,900 employees. Formed as a Canadian corporation in January 2005, Novelis is a wholly owned subsidiary of Hindalco Industries Limited - Asia's largest integrated producer of aluminium and a leading producer of copper. Based in Mumbai, India, Hindalco is one of the most cost-efficient aluminium producers globally.

All the components of ROLL®, from its alloy to the paint, have been expressly designed to simplify the profiling, which is a typical production phase of rollershutters. ROLL® painting cycle: first layer polyurethane paint plus a second layer polyamide protective transparent paint, makes the material particularly resistant to abrasions, both during installation and during daily use.



ROLL® is protected by polyurethane-polyamide paints and it has an excellent resistance to corrosion caused by weathering; moreover it has a great resistance to the rays of the sun, above all UV rays, which cause colour change. The material is protected with a two coat paint system which helps to maintain the uniformity of the colour of the rollershutters over time. ROLL® is available in a wide range of colours, so that it can be perfectly matched with any building facade.

RANGE OF COLOURS

Novelis technology has developed a range of special colours which perfectly reproduce woodgrains. With these colours, it is possible to transfer the typical warmth of wood into a product characterised by a long life cycle.

This colour chart includes proposals of prepainted aluminium colours available in matt, demi and high gloss versions. It is possible to realise prepainted aluminium coils on sample bases. The colours are as close as printing technique allows. We suggest to ask for an original painted aluminium sample.



AC 13L6



AC 4356



AC 43U8



AC 43V9



AC 43E3



AC 4347

Technical Sheet - ROLL®			
Product description			Norms
Aluminium alloy:	-	UNI-EN AW-3105	UNI-EN 573/3
Metal gauge:	Range [mm]	0.25 - 0.33	
Temper:	-	H46	UNI-EN 1396
Coating top side:	-	Polyamide	int. standards
Backing coat:	-	Polyester	int. standards
Metal specification			Norms
Mechanical properties after coating - transverse to rolling direction			UNI-EN1396
Rm:	[MPa]	175 - 225	
Rp0.2:	[MPa]	150 min	
A50:	[%]	2 min	
Tolerance on dimensions:		Gauge	UNI-EN 485/4
		Width and Length	UNI-EN 485/4

CERTIFICATES

Health and Safety

Management System:

BSI OHSAS 18001; 1999

Environment Management

System Certificate:

EN ISO 14001; 2004

Quality Management

System Certificate:

EN ISO 9001; 2000

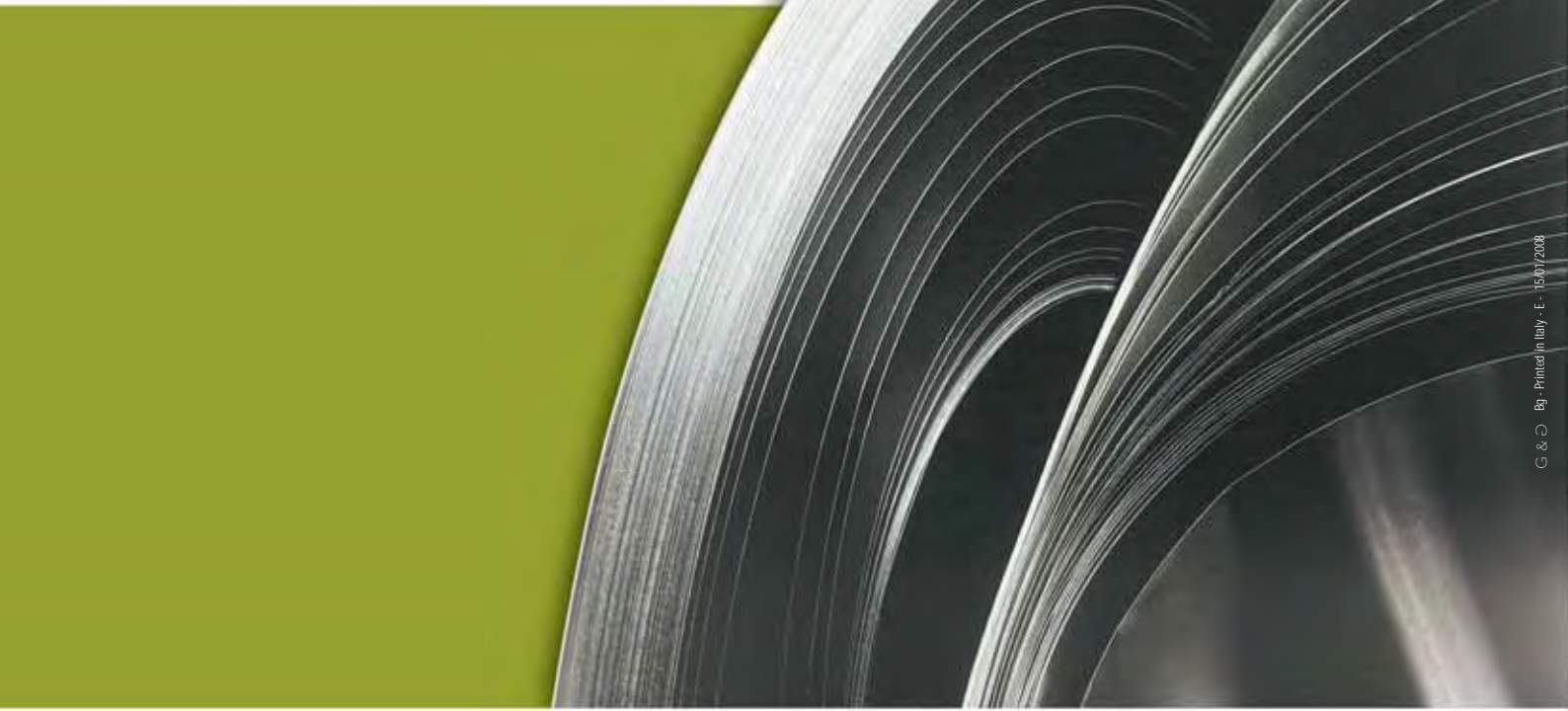


Technical Sheet - ROLL®				
Pre-treatment				
Degreasing and chromium free treatment on top and reverse side				
Organic coating specification (ECCA and UNI-EN 1396)			Top side	Backing coat
Coating system:			Polyamide	Polyester
Typical coating thickness:	ECCA T1	[µm]	22	4 approx.
Pencil hardness:	ECCA T4	KOH-I-NOR	H	
Specular gloss to 60°:	ECCA T2	[units]	10 - 60 gloss	30 - full gloss
Adhesion 90°/180°:		[%]	100	
Adhesion on cross hatch + impact:		[%]	100	100
M.E.K. / Solvent rubbing test:	ECCA T11	double rubs	150	
Resistance to cracking on bending:	ECCA T7	-	0.5 T	



Novelis Group is an important entity in Italy, too. There are two plants near Milan - Bresso and Pieve Emanuele. Novelis' Bresso plant produces prepainted rolled products using a range of paints and surface finishes. Pieve plant produces aluminium coil and sheet. It is equipped with casters and cold rolling facilities. Novelis is present throughout the whole Italian market thanks to its four sales centres in Verona, Bologna, Florence and Rome.

ROLL® is the Novelis brand name for its prepainted aluminium coils, expressly designed for the production of rollershutters. The aluminium rollershutters produced with ROLL® perfectly match the strength of this metal and its lightness. The combined use of aluminium and expanded polyurethane in the rollershutters limits the loss of heat inside the houses and reduces the acoustic impact.



Novelis Italia

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