

PROVEN SOLAR REFLECTANCE

A collection of 25 colours with proven solar reflectance from a study carried out in collaboration with the Faculty of Engineering of the University of Porto.

COLOUR DESCRIPTION	THERMO REFLECTIVE TECHNOLOGY COLOUR	TOTAL SOLAR REFLECTANCE (TSR)				PAGE EXTERIOR ABRASIVE BLOCK COLOUR GUIDE
		CARSO 1	ERALIT	NOVATEX HD	NOVÁQUA HD	
GRANIT GRAY	900R	47	46	49	51	17
SLATE GREY	901R	35	-	-	35	23
BEJA BROWN	902R	46	46	43	46	113
PURPLE SHADOW	903R	47	44	44	44	31
BASALT GREY	904R	38	35	39	48	27
NOCTURNAL GREY	905R	-	-	35	36	28
SHALE GRAY	906R	44	42	43	51	18
ROCK GREY	907R	43	42	43	44	22
FURNAS GREY	908R	44	40	49	44	32
TEIDE GREY	909R	38	38	40	45	33
TABACCO	910R	40	39	39	41	110
ANCHOR GREY	911R	50	50	51	50	21
EUPHRATES BLUE	912R	45	46	45	44	158
THALASSA BLUE	913R	37	35	36	-	160
NORDIC GREY	914R	40	38	44	45	162
EGYPT BLUE	915R	38	38	40	40	163
BOSPORUS BLUE	916R	37	-	37	36	165
ALOE VERA GREEN	917R	38	38	43	43	144
ROSEMARY	918R	40	40	38	46	145
TIGER EYE	919R	46	45	45	47	108
BAOBAB BROWN	920R	42	40	-	39	109
IONA CHESTNUT	921R	40	41	-	41	123
MULEMBA GREEN	922R	39	40	41	42	134
CAROB	924R	38	35	37	42	125
PASSION FRUIT	925R	44	38	45	48	122

CIN

CIN – CORPORAÇÃO INDUSTRIAL DO NORTE, S. A.
Av de Dom Mendo nº 831 (antes EN13 km6) - 4474-009 Maia - Portugal
T +351 229 405 000 - customerservice@cin.com
www.cin.com

CIN VALENTINE, S.A.U.
P. I. Can Milans - Riera Seca, 1 - 08110 Montcada i Reixac - España
T +34 93 565 66 00 - customerservice.es@cin.com

PINTURAS CIN CANARIAS, S.A.U.
P. I. Güimar, Manzana 13, Parcela 2 - 38509 Güimar - Tenerife - España
T +34 922 505 330 - customerservice@cin.com

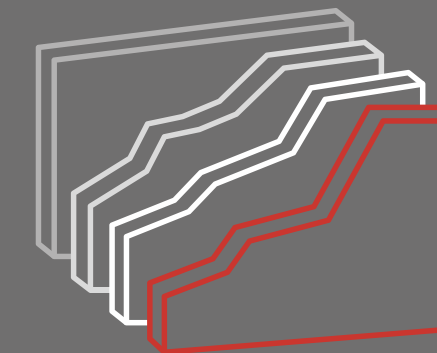
CIN CELLIOSE, S.A. - Division CIN Déco
Chemin de la Verrerie - BP 58 - 69492 Pierre Bénite Cedex - France
T +33 (0) 4 72 39 77 35 - customerservice.celliose@cin.com

CIN COATINGS POLSKA Sp. z o.o.
ul. Parkowa 63A - 05-806 Pecice Male - Polska
T +48 22 8 68 10 68 - T +48 518 194 418 - customerservice.pl@cin.com

TINTAS CIN ANGOLA, S.A.
Rua Pedro Álvares Cabral, 21 - CP 788 - Benguela - Angola
Tel. +244 272 235 059 - customerservice.ao@cin.com

TINTAS CIN DE MOÇAMBIQUE, S.A.
Av. das Indústrias, 2507 - Machava - Moçambique
Tel. +258 21 748 012 - customerservice.mz@cin.com

CIN



SYSTEM CIN-k

THERMO - REFLECTIVE TECHNOLOGY

TECHNICAL COUNSELLING

You will have a qualified team of professionals at your service who will answer all your technical questions, catering to your specific needs. For more personalised advice, go to a CIN store or contact the CIN Customer Service (Advice Service and Technical Follow-up) through the blue number 808 253 253 or by email at customerservice@cin.com

For more personalised advice, go to a CIN store or contact the CIN Customer Service (Advice Service and Technical Follow-up) through the blue number 808 253 253 or by email at customerservice@cin.com

THERMO-REFLECTIVE TECHNOLOGY

The thermal insulation system of exterior walls, also called by the abbreviation **ETICS (External Thermal Insulation Composite System)** is a result of the low thermal conductivity of the insulator used, traditionally expanded polystyrene sheets (EPS).

However, in this type of systems it is not advisable to apply intense/dark colours, due to its high solar absorption coefficient.

Colours with a solar absorption coefficient of more than 0.7, i.e. with a TSR (Total Solar Reflectance) of less than 30%, should not be applied to this type of system as they increase the risk of early degradation of the coating and/or cracking of the substrate.

CIN offers an intense/dark colour palette using this innovative Thermo-reflective Technology that meets the TSR > 30% criterion.

This technology is present in our thick coatings (Carso 1 and Eralit), acrylic paint with a fine sand textured film (Novatex HD) and smooth acrylic paint (Nováqua HD).

BENEFITS OF THERMO-REFLECTIVE TECHNOLOGY

COLOUR	THERMAL COMFORT / ENERGY SAVING	DURABILITY
<ul style="list-style-type: none"> • More freedom in choosing colour using ETICS for your façade; • Prevents the coating from reaching high temperatures. 	<ul style="list-style-type: none"> • Higher thermal comfort levels inside buildings; • Significant energy savings in the building's HVAC. 	<ul style="list-style-type: none"> • Reduction of the risk of early coating degradation and/or cracking of the substrate; • Improvement of long-term coating resistance.

TECHNOLOGY AND INNOVATION IN COLOUR

The main characteristic of a colour with Thermo-reflective Technology is its **high capacity to reflect solar radiation.**

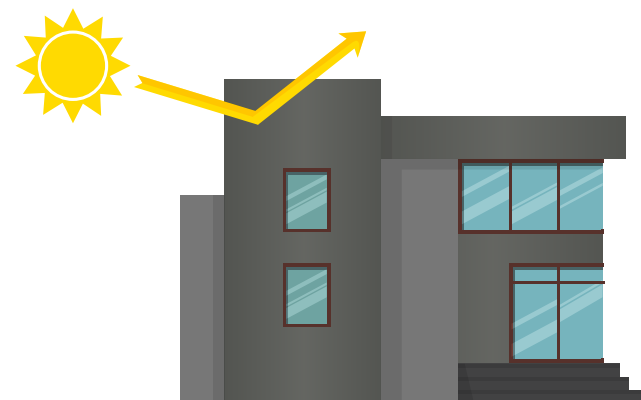
The TSR value of a surface enables us to quantify the heating of a surface under exposure to the sun. A high TSR value means that the surface reflects a higher percentage of solar energy, i.e. it heats up less when exposed to the sun. This prevents the coating from reaching high temperatures, reducing the risk of early degradation of the thermal insulation system.

Technological development and innovation have been a strong focus of CIN in order to meet the needs of customers, suppliers and the construction market.

CIN-k Thermo-reflective Technology allows greater freedom in the choice of colour using ETICS for your façade, combining the advantages of greater reflection of solar energy without limiting colour choices.



Without Thermo-Reflective Technology
Strong solar absorption = High thermal impact



With Thermo-Reflective Technology
Weak solar absorption = Low thermal impact

PAINTING SOLUTIONS

CARSO 1

Thick high-quality coating for the protection and decoration of façades, made of a synthetic co-polymer, with medium-grained marble particles (1.2mm) and pigments with high resistance to UV rays. It presents an excellent flexibility and easy application, avoiding waste in the implementation phase.



NOVATEX HD

High durability paint for the protection of façades, 100% acrylic and fine matt sand texture finish. Novatex HD is reinforced with quartz providing a unique and exclusive decorative effect that allows to disguise small imperfections by coating the typical micro-fissures of fresh façades



100% acrylic, smooth matt paint for the protection of façades with durability that meets the most demanding requirements. It offers maximum resistance to nocturnal condensation and changes in colour caused by atmospheric agents.

Nováqua HD is a product used to renovate appearance in ETICS.

NOVÁQUA HD

A WIDE RANGE OF COLOURS



Important note: Notwithstanding the care taken in the production of this catalogue, there may be slight differences between the colour displayed and the products supplied.

