

INOX VISION

Architecture
Building
and
Construction



ACCIAI
SPECIALI
TERNI

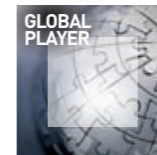
INOX VISION

OUR VISION: A BEAUTIFUL AND SUSTAINABLE FUTURE

Global vision, innovation, dedication to the customer, reliability and passion: thanks to these values, Acciai Speciali Terni has established itself and become a key player in the global production of stainless steel. All over the world, more and more architects and designers choose our stainless steel for its aesthetic appeal, durability

and sustainability, enjoying unique creative freedom thanks to our wide portfolio of finishes and decorative options. With its superior longevity our stainless steel minimises maintenance costs, while its limitless recyclability contributes to the worldwide commitment to sustainable development.

GLOBAL PLAYER

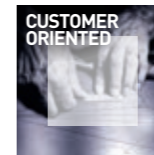


WE CATER TO DESIGNERS AND ARCHITECTS WORLDWIDE

Acciai Speciali Terni is an operating unit in the Material Services Business Area within the thyssenkrupp Group, present in 480 locations with almost 20,000 employees and serving more than 200,000 clients in over 40 countries. The strength of its single worldwide sales organization

offers you accurate and personalized answers. Wherever you are, you can count on the experience, expertise and innovative mindset of our technical and commercial team. Today, more than ever, no market is too far for our knowledge, passion and spirit of innovation.

CUSTOMER ORIENTED



THE BEST GRADE AND FINISH FOR YOUR PROJECT

Our broad range of austenitic stainless steels offers outstanding solutions for exterior building cladding, where strength and corrosion resistance are critical. Our ferritic grades make it easy to benefit from the advantages of stainless steel also in interior building applications. Furthermore, our wide offer of

finishes and decorative options provides designers and architects with incomparable freedom and appealing results. We commit to supplying the best grade and finish for your project, every day, thanks to the dedication of our team of researchers, salespeople and specialized technical engineers.

INNOVATIVE

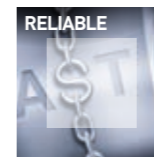


OUR OFFER FOR INNOVATIVE FACADES AND PANELS

Stainless steel panels and claddings are increasingly sought-after solutions to add an innovative touch that makes architectural projects stand out. Our range has thus developed to enhance your exterior project's design and creativity with new

special surface finishes – Vernest®, patterned or decorated – while building interiors and elevator claddings can increase their appeal with our anti-fingerprint finish Silver Ice® and Silver Ice® colored.

RELIABLE

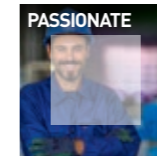


THE TIMELESS VALUE OF RELIABILITY

Our reliability is based on our effort to guarantee the highest quality levels not only in production but also in customer service and assistance. Today we work more efficiently than ever, thanks to a cross-functional organization that controls production, orders and shipping and gives customers a realistic estimated date of delivery, which can be monitored even from mobile devices.



PASSIONATE



BUILDING ON THE HISTORY OF A TALENTED PEOPLE

Italy is a country of beauty and creativity, where some of the greatest designers and architects of all time were born. Inspired by Italian creativity, cleverness and talent, our passion for stainless steel has made Acciai Speciali Terni a global partner for visionary designers and accomplished architects – and for anyone who appreciates projects of beauty, sustainability and durability.

**NO MARKET IS TOO FAR AWAY
FOR OUR KNOWLEDGE, PASSION
AND SPIRIT OF INNOVATION**

EXTERIOR APPLICATIONS



Façades claddings

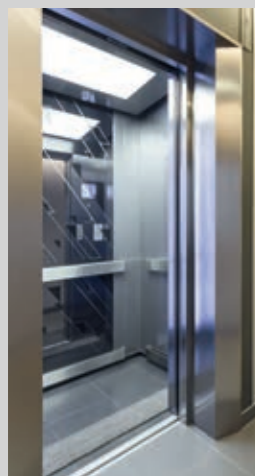
Grades:

304-316L-470LI

Finishes:

- Patterned
- Polished, Scotch Brite
- Pre-painted (Vernest®)

INTERIOR APPLICATIONS



Floors and ceilings, interior claddings, elevators

Grades:

304-430-441 HP

Finishes:

- Patterned
- Polished, Scotch Brite
- Anti-fingerprint
(Silver Ice® and Silver Ice® Colored)

STRAIGHT TO THE FUTURE

Stainless steel solutions
for the Architectural sector:
façades cladding and
interior applications

AST'S PATTERNED FINISHES FOR EXTERIOR AND INTERIOR SURFACES

Our stainless steels are available in a wide range of finishes. In addition to the more traditional ones, such as Scotch Brite and Polished, we offer a variety of special surface finishes that give architects a great range to create with. Our patterned finishes offer attractive design options and a variety of

shine levels, considerably enhancing the aesthetic impact of buildings' external cladding. Our goal is always to provide architects and designers with both inspiration for innovative visual effects and confidence for well-established uses, like wall cladding and elevator panels.



Patterned Finishes



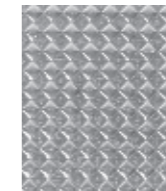
Linen



Elephant skin



Square



Diamond

Micro-Patterned Finishes *



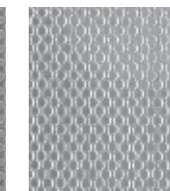
Micro skin



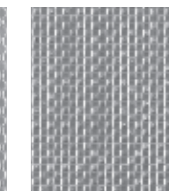
Texture



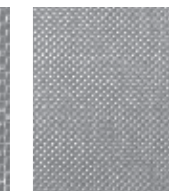
Droplets



Honeycomb



Weave



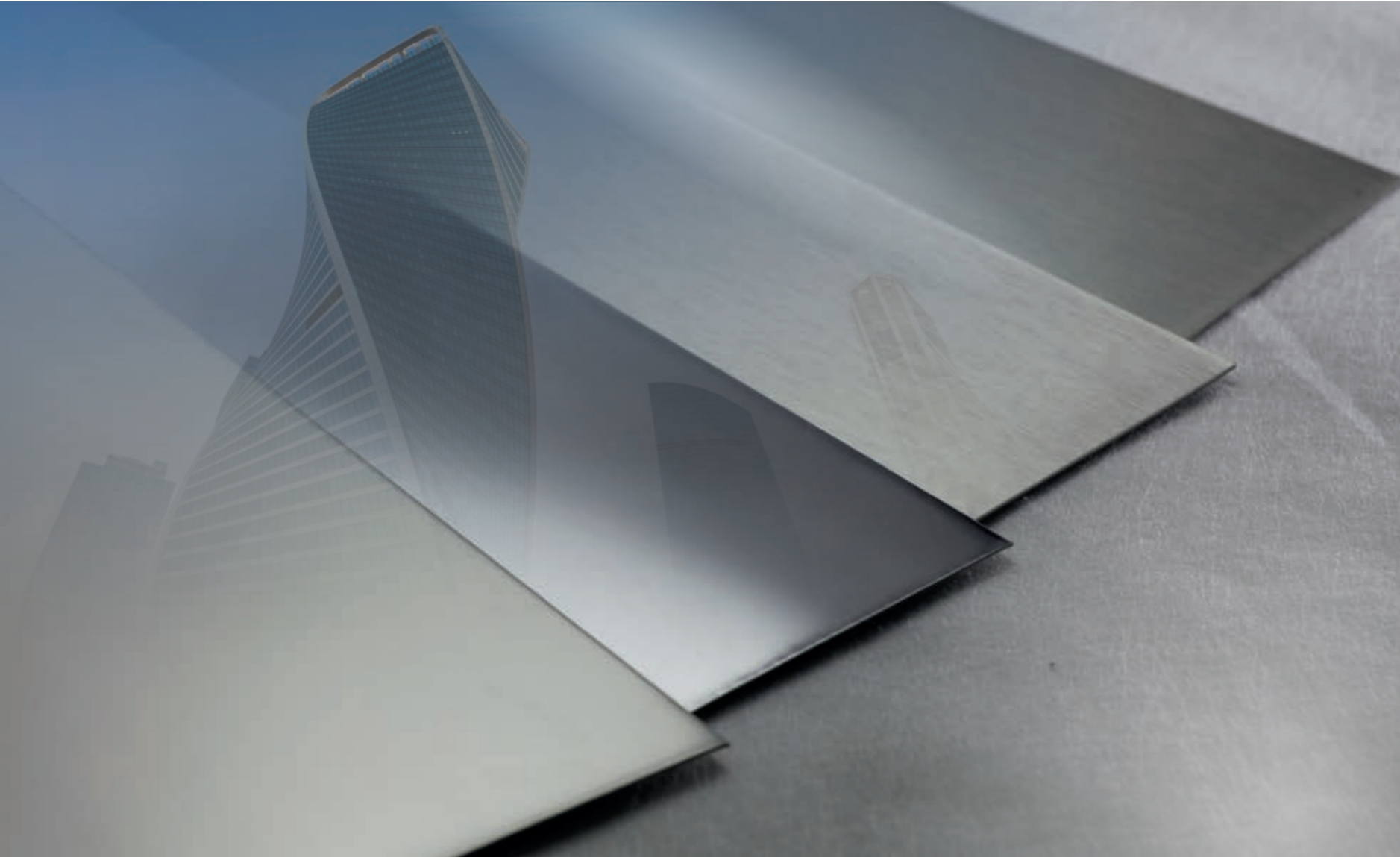
Microcircle

* On request

AST'S STANDARD FINISHES FOR EXTERIOR AND INTERIOR SURFACES

Our standard finishes offer architects and designers a wide range of solutions for surface aesthetics, ranging from the shiny, mirror-like appearance of Bright Annealed finish to the less reflecting

2B finish, all the way to the finely or heavily "scratched" surfaces typical of our popular Scotch Brite and Polished looks.



Standard Finishes



2B

BA



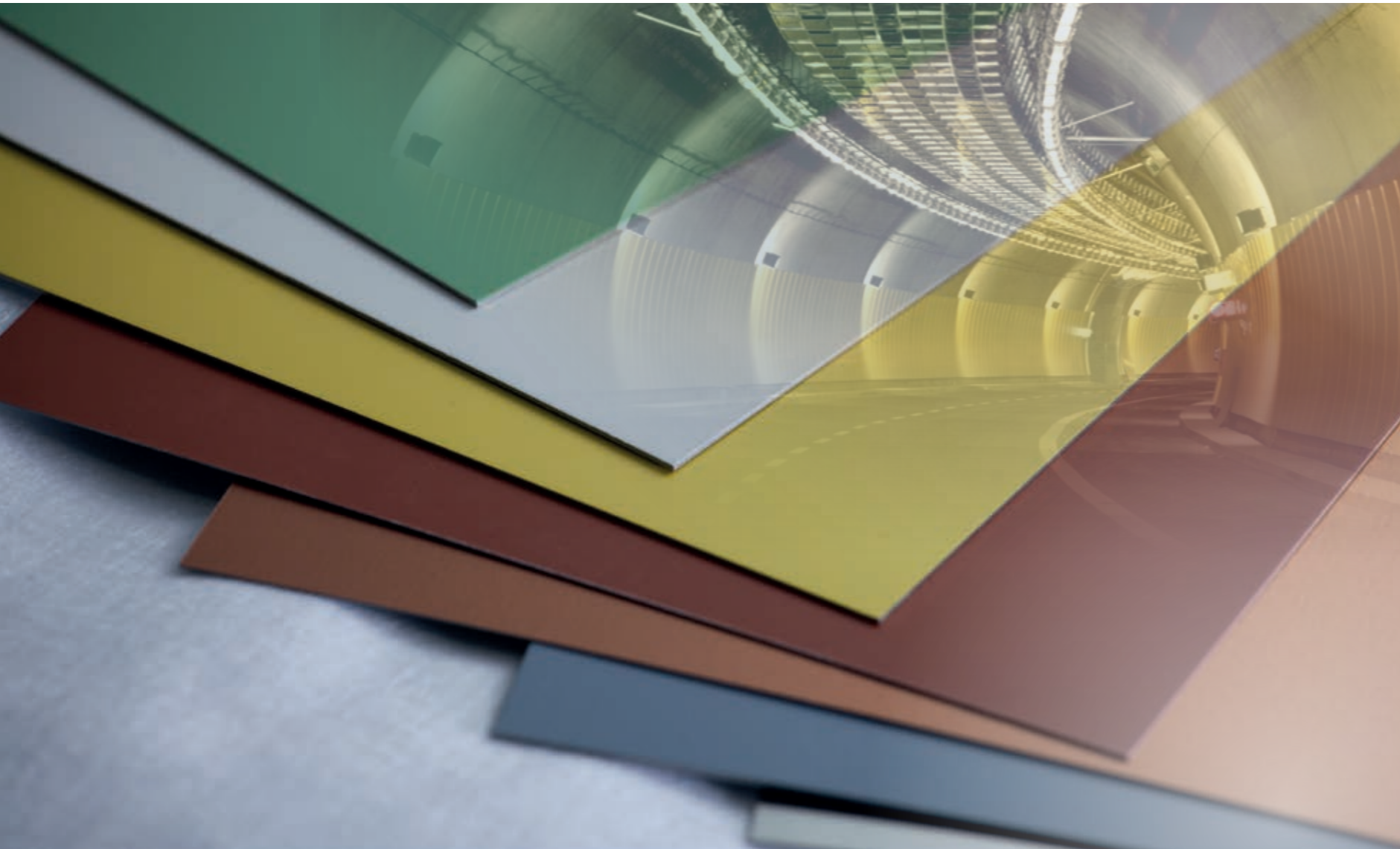
Scotch Brite

Polished

AST'S COATED FINISHES FOR EXTERIOR SURFACES

Our new family of coated stainless steels takes aesthetics to the next level while also adding new functionalities to surfaces. Vernest® is a pre-painted stainless steel offering both unlimited colour options and superior resistance to the

elements (rain, UV radiation etc.), making it a top-quality solution in architectural and construction projects where aesthetics and performance are success factors.



Pre-painted (Vernest®)*



*Any RAL colour is available upon request.

AST'S ANTI-FINGERPRINT FINISHES FOR INTERIOR SURFACES

Silver Ice® anti-fingerprint coatings provide stainless steel surfaces with superior ease of cleaning and scratch resistance: a perfect solution for interior wall cladding in public buildings,

shopping centres, offices and more. In addition, the new colour tones of Silver Ice® coatings (such as the new Silver Ice® Black) give everlasting steel a brand new visual feeling.



Anti-fingerprint (Silver Ice®)



Anti-fingerprint Colored (Silver Ice® Colored)



Black*



Yellow*

* other colors are available on request

OUR GRADES FOR THE ARCHITECTURE, BUILDING AND CONSTRUCTION SECTOR

With its superior aesthetics, durability and sustainability, stainless steel is a perfect option in the field of architecture. Heat and corrosion resistance also make it ideal for any type of building or construction project, while our wide portfolio of grades gives designers and architects maximum flexibility for a variety of different final applications.

		AUSTENITIC					
		304			316L		
		EN 1.4301			EN 1.4404		
			Norm	Typical value		Norm	Typical value
CHEMICAL ANALYSIS (APPROXIMATE) ¹	C		≤ 0.07	0.04		≤ 0.03	0.03
	Cr		17.5÷19.5	18.2		16.5÷18.5	16.7
	Ni		8-10.5	8.1		10÷13	10.3
	Mo					2÷2.5	2.1
	Value		Norm	Typical value		Norm	Typical value
MECHANICAL PROPERTIES ²	Rm		540÷750	650		530÷680	610
	Rp0,2		≥ 230	270		≥ 240	300
	A%		≥ 45	54		≥ 40	50
RESISTANCE TO CORROSION ³		Min	Max	Med	Min	Max	Med
	PREN (Pitting Resistance Equivalent Number)		18.8	21.3	20.1	23.1	26
DELIVERY CONDITIONS		Hot rolled, thickness 1,85 to 6.5 mm Cold rolled, thickness 0.35 ⁴ to 5 mm Width up to 1520 mm Finish: 1, 2D, 2B, BA, SB, polished, patterned and Silver Ice®			Hot rolled, thickness 2.5 to 6.5 mm Cold rolled, thickness 0.35 ⁴ to 5 mm Width up to 1520 mm Finish: 1, 2D, 2B, BA, SB, polished, patterned and Silver Ice®		

		FERRITIC					SUPER FERRITIC			
		430			441HP		470LI			
		EN 1.4016			EN 1.4509		EN 1.4613			
			Norm	Typical value		Norm	Typical value		Norm	Typical value
			≤ 0.08	0.04		≤ 0.03	0.02		≤ 0.03	0.01
			16÷18	16.2		17.5÷18.5	17.8		22÷25	24
			Norm	Typical value		Norm	Typical value		Norm	Typical value
			430÷600	500		430÷630	470		430÷630	490
			≥ 280	300		≥ 250	300		≥ 250	330
			≥ 20	27		≥ 18	30		≥ 18	30
		Min	Max	Med	Min	Max	Med	Min	Max	Med
		16.8	18.9	17.3	18	19.1	18.5	23.8	25.3	24.5
		Hot rolled, thickness 2.5 to 6.5 mm Cold rolled, thickness 0.35 ⁴ to 3 mm Width up to 1520 mm Finish: 1, 2D, 2B, BA, SB, polished, patterned and Silver Ice®			Hot rolled, thickness 2 to 6.5 mm Cold rolled, thickness 0.35 ⁴ to 3 mm Width up to 1520 mm Finish: 1, 2D, 2B, BA, SB, polished and patterned			Hot rolled, thickness 5 to 6.5 mm Cold rolled, thickness 0.35 ⁴ to 3 mm Width up to 1520 mm Finish: 1, 2D, 2B, BA, SB, polished and patterned		

¹ **Approx. chemical composition.** Reference values are shown in the table
Legend: Rm [Tensile strength]
² **Mechanical properties.** Rp_{0,2%} [Yield strength]
A% [Elongation A80 (<3mm) / A5 (≥3mm)]
Hardness: [ASTM A 370-05]
³ **Indice di PREN.** Corrosion resistance index
The ability of stainless steel grades to resist pitting corrosion is expressed by a numeric indicator called PREN (Pitting Resistance Equivalent Number). PREN can be calculated using a mathematical formula, which uses mass-percentage of selected chemical elements found in stainless steel grades as input variables.
PREN(Austenitic)=%Cr+3.3(%Mo)+16(%N) - PREN(Ferritic)=%Cr+3.3(%Mo)
⁴ The availability of the 0.35 mm thickness will be checked on request.

NOTE:
For the whole scenario of product grade range please refer to our product catalogue



Linen

FROM OUR REFERENCES BOOK

CHINA

For the cladding of a business building in Beijing, China, facing panels in AST 316L, Linen finish, 2-mm-thick stainless steel were applied between windows. Linen finish is a patterned finish with high aesthetic value, ensuring high performances thanks to strong corrosion and scratch resistance. This type of surface

ensures excellent brightness, light and reflectivity, providing the building with a remarkable and attractive aesthetic impact.

Construction time:	2018 / 2019
Country:	China (Beijing)
Supplier:	Acciai Speciali Terni
Stainless steel grade:	316L
Surface finish:	deco - linen
Size (thickness):	2 mm



Scotch-Brite

FROM OUR REFERENCES BOOK

ITALY

For the cladding of a company's headquarters in Italy, AST 470LI, Scotch-Brite finish, 1.2-mm-thick stainless steel sheets were provided with an omega-shaped reinforcement and a stiffening profile attached to the back of each panel, all assembled on an aluminium frame. The super-ferritic 470LI stainless steel used for the panelling is an innovative material ensuring high

performances, recommended in particular for industrial environments due to the strong corrosion resistance granted by its high chromium content. The final result effectively exemplifies 470LI's winning combination of corrosion resistance and aesthetic appeal.

Country:	Italy (Padua)
Supplier:	Acciai Speciali Terni
Stainless steel grade:	470LI
Surface finish:	SB
Size (thickness):	1,2 mm



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