

Online-Seminar Industriefassade 2022

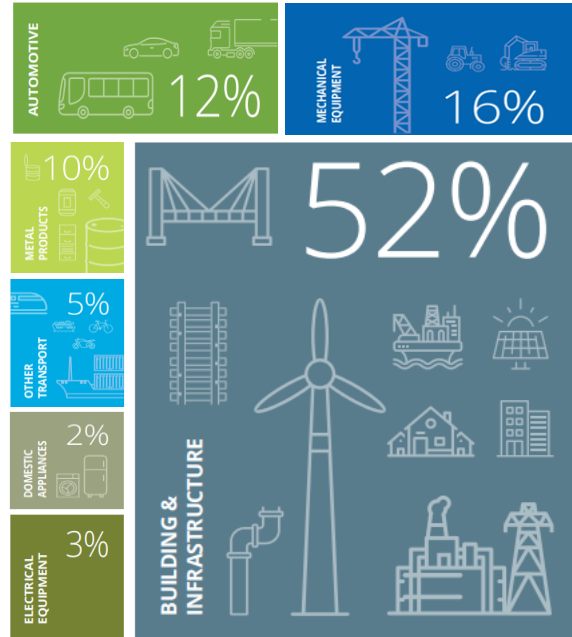
21. Juni, 2022

Mechthild JANISCHOWSKY, Flat Products Germany

Christoph RADERMACHER, Construction Germany



ArcelorMittal in a nutshell




158,000
Mitarbeiter


11
Entwicklungszentren


60
Länder


71.5
Millionen to
Rohstahlerzeugung/
Jahr

Online-Seminar Industriefassade

“Die Fassade ist die Visitenkarte des Architekten”

“...und soll es auch bleiben”



Beschichteter Stahl – ein vielschichtiges Material für die Industriefassade

Stahlerzeugnisse bieten durch ihre hervorragende Einbindung in Normen Planungssicherheit für Architekten und Bauingenieure

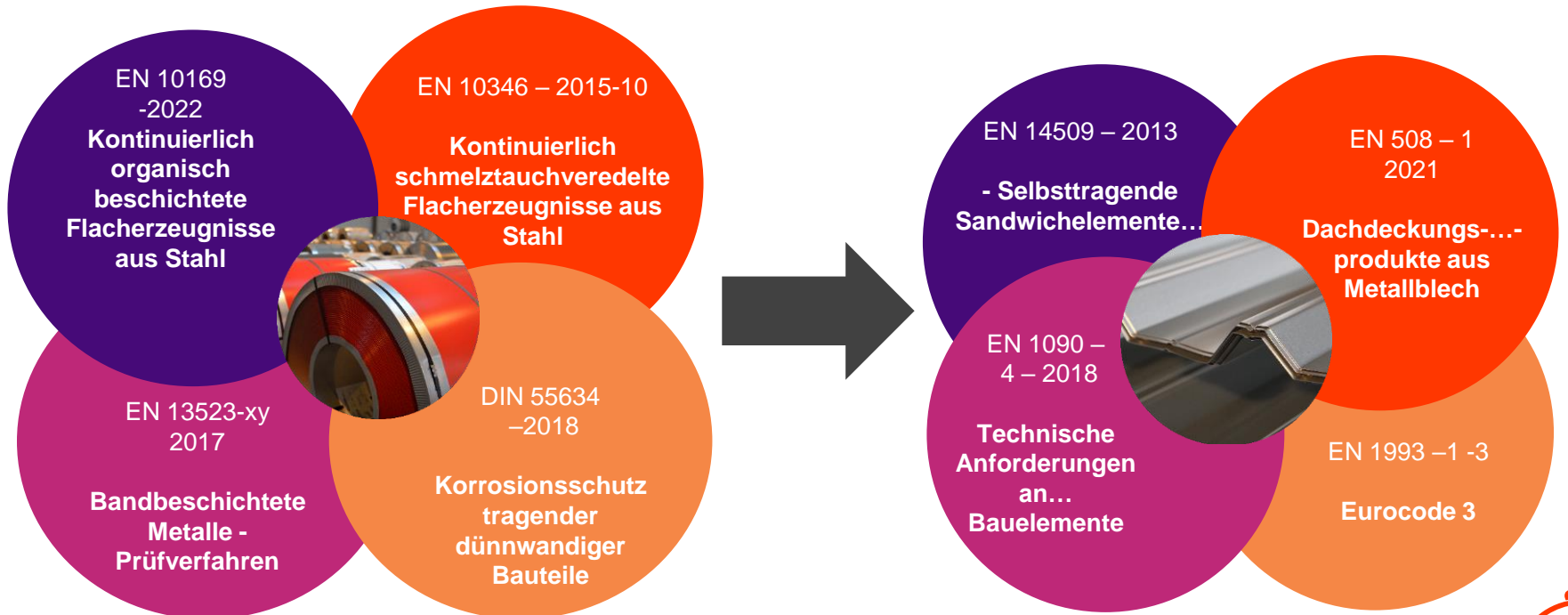
Normen fokussieren sich auf die Funktionalität eines Gegenstands

„Die Fassade ist die Visitenkarte des Architekten“

Normen fokussieren sich nicht auf die Schönheit eines Gegenstandes

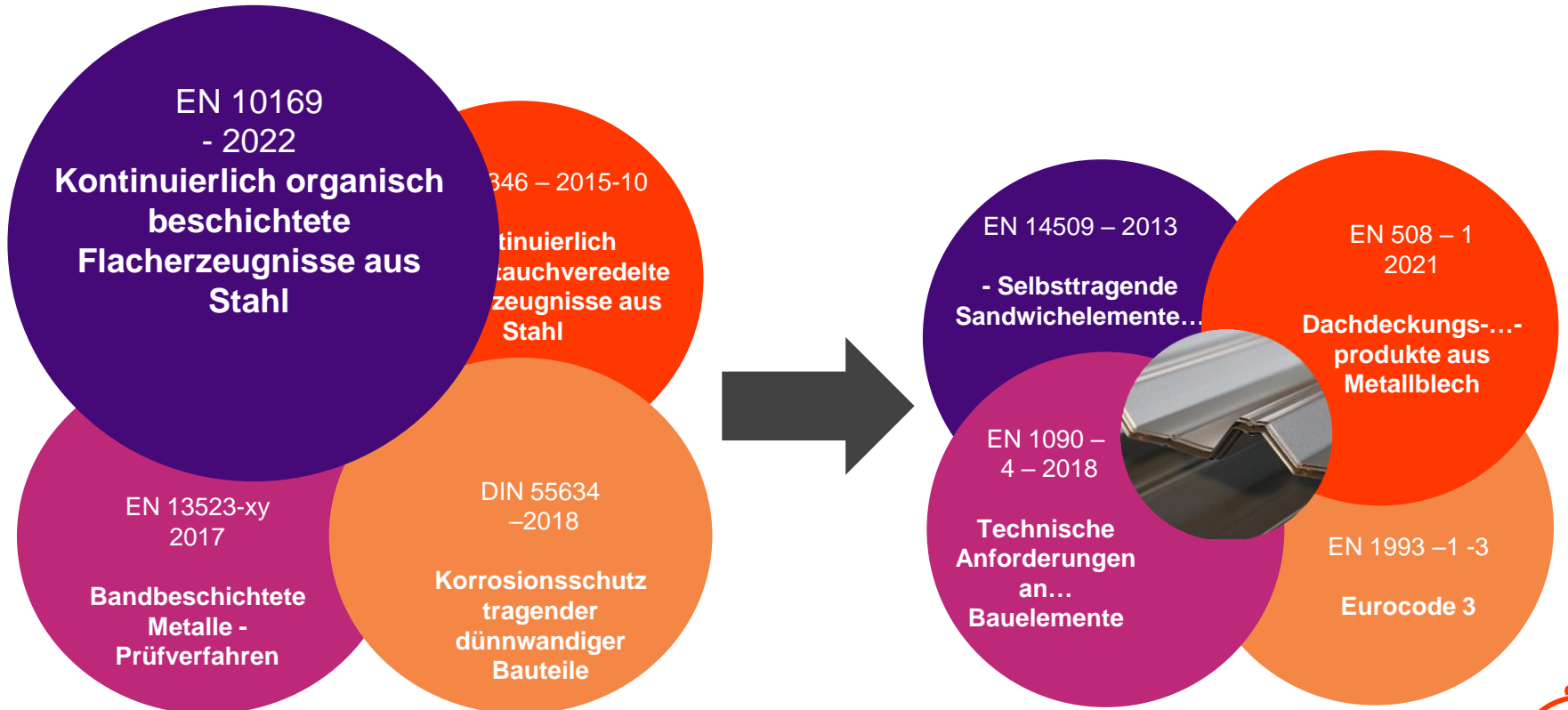
Beschichteter Stahl – ein vielschichtiges Material für die Industriefassade

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UV and Korrosivitätskategorien gemäss DIN EN 10169:2022

Extract of Table 7 – Requirements for natural outdoor corrosion resistance tests
(Please consult official document for details)

Corrosion resistance category	Test duration years	Average edge delamination ^d mm	Damage on bend	Degree of blistering ^e
RC2	1	≤10	b	2 (S4)
RC3	2	≤5	b	2 (S4)
RC4	2	≤2	c	2 (S2)
RC5	2	≤2	c	2 (S2)
RC5+	4	≤2	c	2 (S2)

b No requirements, except in case of complying to specific regulations.

c It shall be checked that no bursting of the organic coating occurs and that there is no apparent corrosion product at the progressive radius bend, in an area located at a distance between 10 mm and 50 mm from the 3 T side panel edge of the specimen.



UV and Korrosivitätskategorien gemäss DIN EN 10169:2022

Extract of Table 8 — Requirements for the UV resistance for natural and artificial testing conditions (Please consult official document for details)

Requirements	UV resistance category			
	Ruv2	Ruv3	Ruv4	Ruv5
Test duration, natural exposure (years)	2	2	2	4
Test duration e, artificial UV radiation (h)	2000	2000	2000	4000
Maximum colour change ΔE^* a before and after the test (CIELab units)	5	3	3 ^c / 2 ^d	3 ^c / 2 ^d
Minimum retained gloss after the test (RG b), %	30	50 ^c / 60 ^d	80	80

a The ΔE^* value is not applicable for saturated and other special colours such as metallics and pearlescent. In that case the colour change verification method and its acceptance value shall be agreed at the time of enquiry and order.

b The retained gloss (RG) is the ratio of the final gloss value, given in percent. The RG requirement is not applicable to matt coating systems as defined in Table 3.

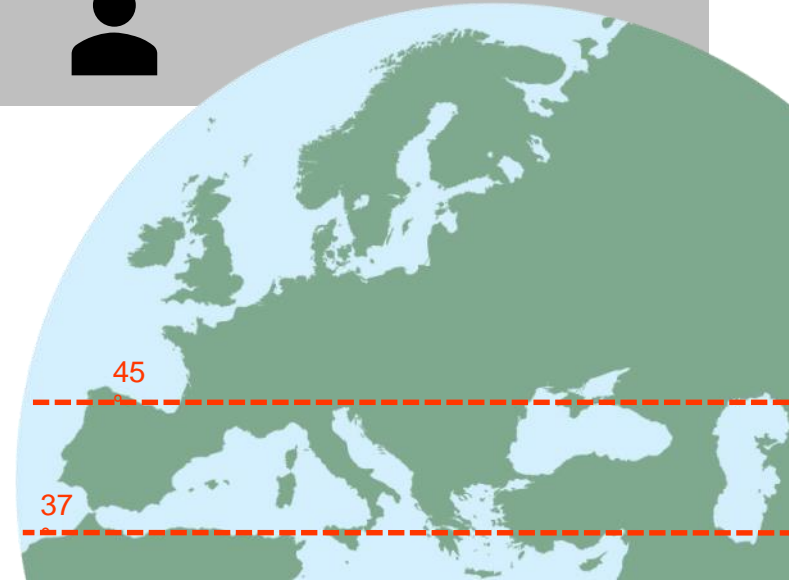
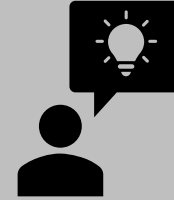
c natural UV radiation.

d artificial UV radiation.

e The UV category can be granted after an artificial UV radiation test but it shall be validated after completion of natural ageing in an accredited outdoor exposure site.

Die Norm beschreibt mögliche optische Änderungen über die Zeit.

Die Tabelle beschreibt nichts zum Zeitpunkt des Einbaus.



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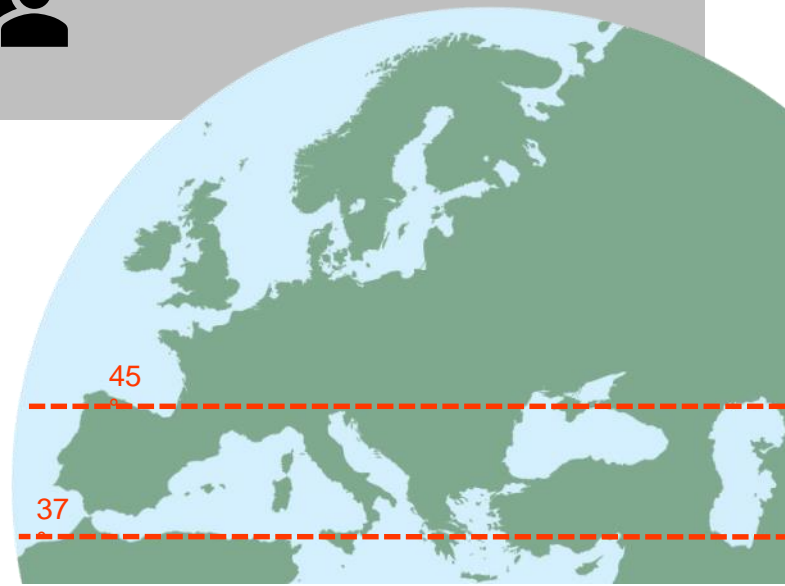
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Ist sich der Bauherr dieser Änderung bewusst?

Akzeptiert er diese Farbänderung?

Was bedeutet das optisch?



UV and Korrosivitätskategorien gemäss DIN EN 10169:2022

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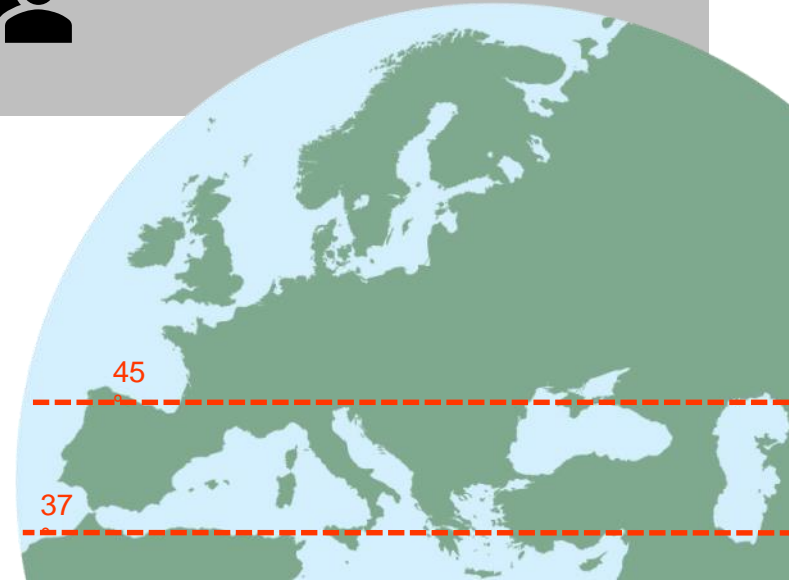
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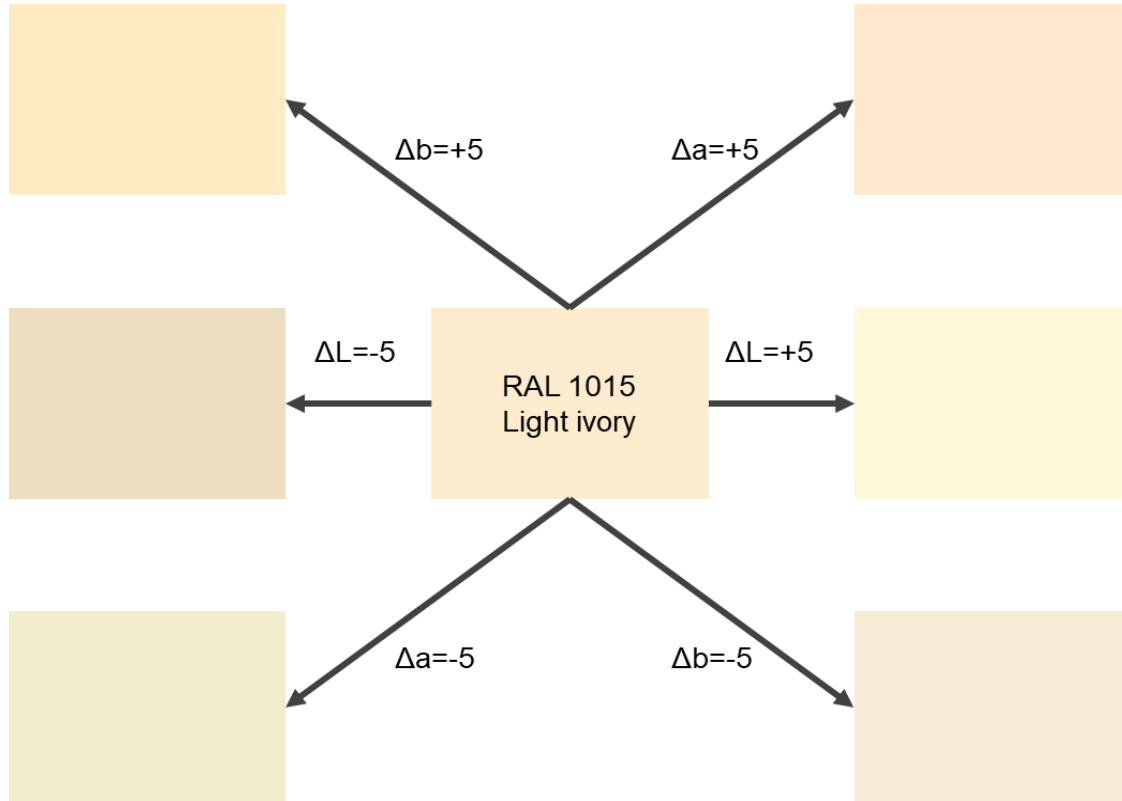
Ist sich der Bauherr dieser Änderung bewusst?

Akzeptiert er diese Farbalterung?

Was bedeutet DeltaE „5“?



Farbabweichungen als Maximalbeispiel



UV and Korrosivitätskategorien gemäss DIN EN 10169:2022

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Für RUV2 könnte nach 2 Jahren gelten:

[GU]	Original	Nach 2 Jahren
hochglänzend	80	30
Standard	30	10
Matt	10	

Konsequenzen



Gebäudedächer in Südafrika

~~"Das ist halt Stahl"~~



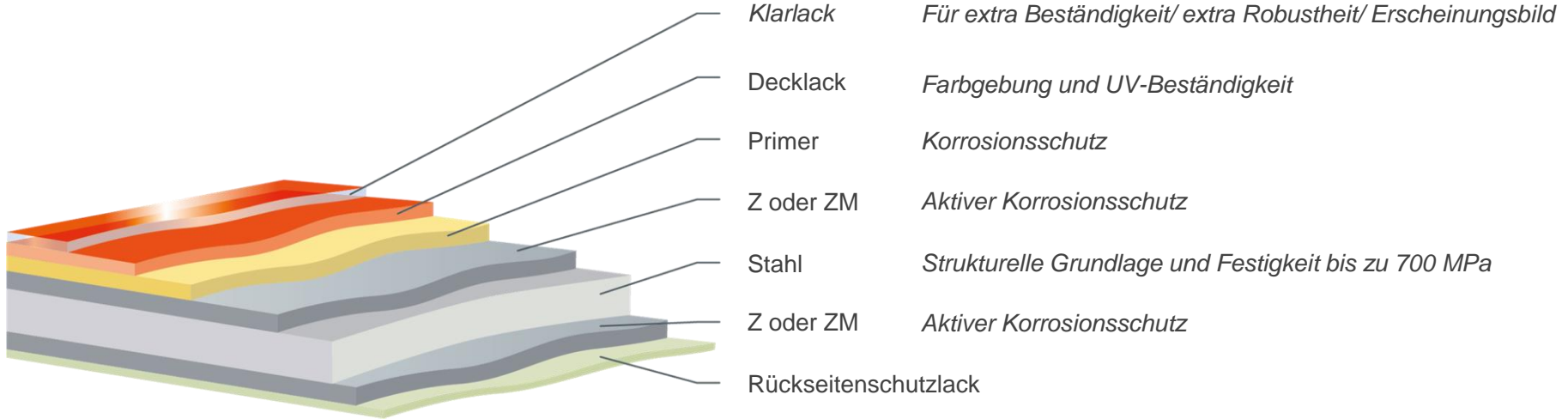
Indaten® : Witterungsbeständiger Stahl

- Einzigartiges Aussehen
- Keine Instandhaltung erforderlich
- Exzellenter Korrosionsschutz
- Weites Abmessungsspektrum
- Hohe Lebensdauer
- Umweltfreundlich und zu 100% recyclebar



*Educational and family center «Pôle Molière», Le Havre (France). ACAUM - Atelier BETTINGER
DESPLANQUES Architectes associés. Picture © Paul Kozlowski*

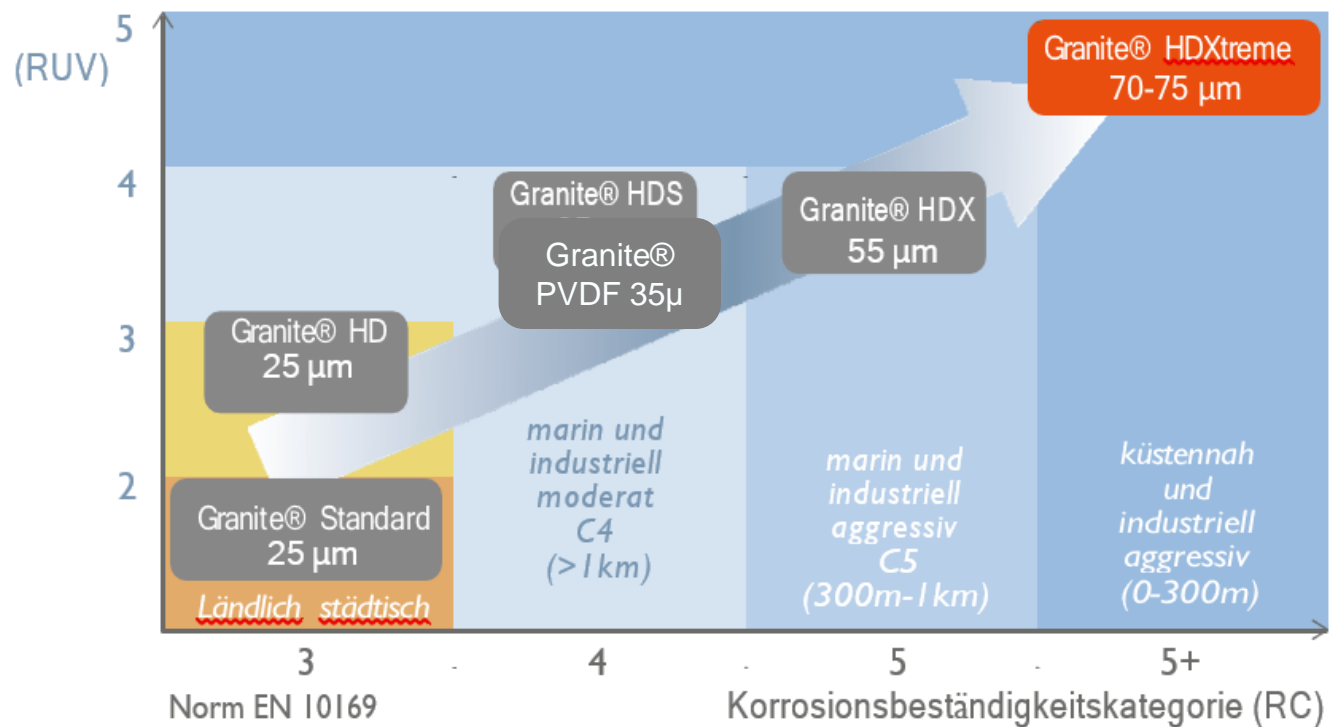
Beschichteter Stahl – ein vielschichtiges Material für Fassadenkonstruktionen



- für mannigfaltige Eigenschaften:
 - Mechanische Festigkeit und Verformbarkeit
 - Korrosions- und UV-beständigkeit
 - Massgeschneiderte besondere Eigenschaften
 - Für das ganz besondere Äußere
 - Verfügbarkeit von Umweltdeklarationen und Ökobilanzen, REACH-konform

Die finale Performance ist ein
Zusammenspiel aller:
dem Stahl und den metallischen und
organischen Beschichtungen
+
Deren Arten und deren Schichtdicken

Beschichteter Stahl – ein vielschichtiges Material für Fassadenkonstruktionen



Granite® Impression

RC4 / RUV4

DISTRIFILL INDUSTRIAL
BUILDING & OFFICES IN
OOSTERHOUT,
NETHERLANDS

ARCHITECT AND
PHOTOGRAPHY: ©
BUREAU PHI BREDA,
NETHERLANDS

CLADDING SYSTEM BY
SBC HOLLANDGROEP



Granite®
PVDF

RC4 / RUV4

THE NOVA ARCADE
SHOPPING CENTRE IN
BRAGA

ARCHITECT: SUA KAY

CONTRACTOR: CIVIL
PORTUGAL

FAÇADE PANELS:
HUURRE IBERICA

COPYRIGHT PICTURES:
HUURRE IBERICA



Granite®
HDX

RC5 / RUV4

DOCKS IN AVILÉS PORT
[NEIGHBOURS OF
OSCAR NIEMEYER]

ARQUITECT : ©
[BARAGAÑO]
ARCHITECTS

PHOTOGRAPHS: ©
MARIELA APOLLONIO
PHOTOGRAPHER



**Granite®
HDX**

RC5 / RUV4

**WERKGEBOUW POST
ZUID, APeldoorn**

ARCHITECTS: ©
COURAGE ARCHITECTEN
& MIES ARCHITECTUUR

PICTURES: © IAN BECK

FAÇADE CLADDED WITH
GRANITE® HDX



**Granite®
HDXtreme**

RC5+ / RUV5

**THE INDI BUILDING IN
GENT (BELGIUM)**

ARCHITECT &
ENGINEERING: ARCADIS

FAÇADE CLADDED WITH
GRANITE® HDXTREME

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ARCELORMITTAL GENT



Vielen Dank für Ihre Aufmerksamkeit



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Online-Seminar Industriefassade 2022

June 21, 2022

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