Introduction to coil coated metal
Acknowledgments

• ArcelorMittal
• BASF
• Becker Industrial Coatings
• Corus
• ECCA France
• ECCA NL
• ECCA UK
Guest lecture content

1. Building envelope examples
2. Coil coated metal
3. Coatings
4. Building applications
5. Cladding systems
6. Cladding profiles
7. Building performance functional design, thermal, fire, acoustic
8. Innovations
1. Building envelope examples
Zoetermeer (Netherlands)
Material: Colorcoat Celestia
Architect: Archipel Ontwerpers
Baglan Bay (UK)
Material: Colorcoat Celestia® & Colorcoat HPS200®
Architect: DRU & Neath and Port Talbot Council
IJmuiden (Netherlands)
Material: Multicoat
Architect: Klunder Architecten
CineMec Ede (Netherlands)
Material: Colorcoat PVDF
Architect: DP6 Architecten
Unilever Rotterdam (Netherlands)
Material: Colorcoat Armatone
Architect: JHK Architecten
Location: Belfast, Ireland
Material: Colorcoat Celestia® & Colorcoat HPS200®
Architect: MHB & Design & Consarc
Location: Nailloux (France)
Material: Système Reynobond Architecture (Alcoa architectural products)
Architect: Axel Letellier
Clinic Sainte Marie, in Cambrai (France)
Material: ISOFRAN & Sauternes 300
Architect: J. Journel
Applix, in Nantes (France)
Material: Sauternes Ecaille
Architect: D. Perrault
Brighton (UK)
Material: HPS200
Architect: RH Partnership
Roissy Terminal F airport, in Paris (France)
Material: Mascaret
Architect: P. Andreux
Stadium, Cardiff (Wales)
Material: Colorcoat Celestia® & Colorcoat HPS200®
Architect: HOK Sport

Photography courtesy of Corus
Housing estate Zwolle (Netherlands)  
Material: Colorcoat Armatec  
Architect: van den Belt
Residential Almere (Netherlands)
Material: Colorcoat PVDF
Architect: Marlies Rohmer architecten
Steel study house Zoetermeer (Netherlands)
Material: Colorcoat Celestia
Architect: Archipel ontwerpers
Next generation Zoetermeer (Netherlands)
Material: Colorcoat Celestia
Architect: An-archie bv
House Zoetermeer (Netherlands)
Material: Colorcoat HPS200
Architect: Gunstra Architectengroep
Houses Leidschenveen (Netherlands)
Material: Colorcoat PVDF
Architect: Oudclad Leiderdorp
Houses Amsterdam (Netherlands)
Material: Colorcoat PVDF
Architect: Tangram Architecten
Apartment buildings Almere (Netherlands)
Material: Colorcoat PVDF
Architect: Atelier Zeinstra Van de Pol
What do these buildings have in common?
They are made with coil coated materials...
2. Coil coated metal (1/3)
What is coil coated metal?
2. Coil coated metal (2/3)
Coil Coating process

The process consists of the following operations:

- **Cleaning** (alkaline degreasing)
- **Surface treatment** (role: improve adhesion between metal and paint, and corrosion resistance)
- **Primer application** (role: bind the topcoat to the substrate, and corrosion resistance)
- **First curing oven**
- **Topcoat application** (role: aesthetic and protective)
- **Second curing oven**
- **Protective film** (if any)
- **On-line inspections**
2. Coil coated metal (3/3)
Advantages

• High constant quality product
• Easier logistics
• Clean process
• Recyclable product
• No need for hazardous or inflammable storage
• Non-air polluting
• Non handling of dangerous chemicals
## 3. Coatings (1/2)

### Product selector

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