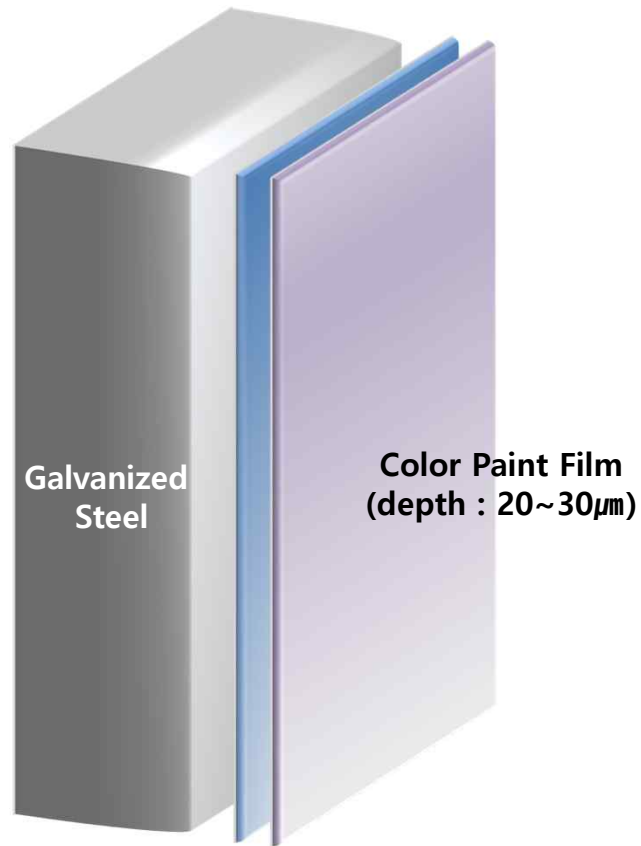


# **PVC-SOL Product**

**2020. 12. 23**

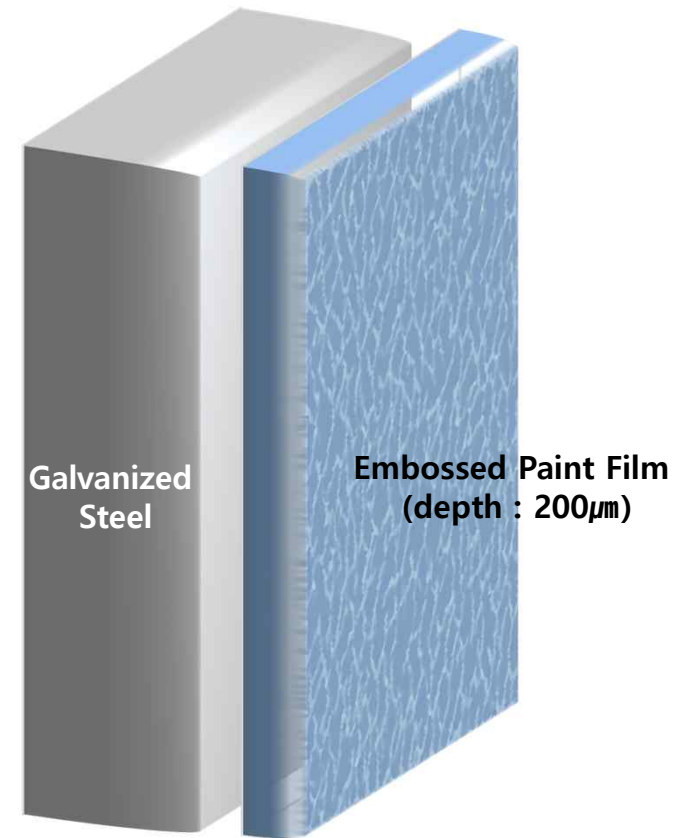
**DONGKUK STEEL**

# 1. Normal PCM vs. PVC-SOL



[ Normal PCM ]

- Film depth: Thin film (20~30µm)
- Film characteristic: Design-oriented design  
(Imagine with color, pattern, etc.)  
Steel's general protective role
- Use: home appliance steel plate, building material  
/ \*Broad, worldwide common



[ PVC-SOL ]

- Film depth: Thick film (200µm)
- Film characteristic: Durability-oriented design  
(Up to 40 years warranty in Europe)
- Use: Durable industrial material  
\*For use in central UK and Europe, and other  
special environments
- Remark: Ensuring characteristics based on EN standards

## 2. Characteristic

PCM is the largest thick film product, which is a type that can be painted over 200 $\mu$ m. Excellent durability and handling during construction work due to the thick film. This is the most popular steel plate product in the UK for a long time.

### [Characteristic]

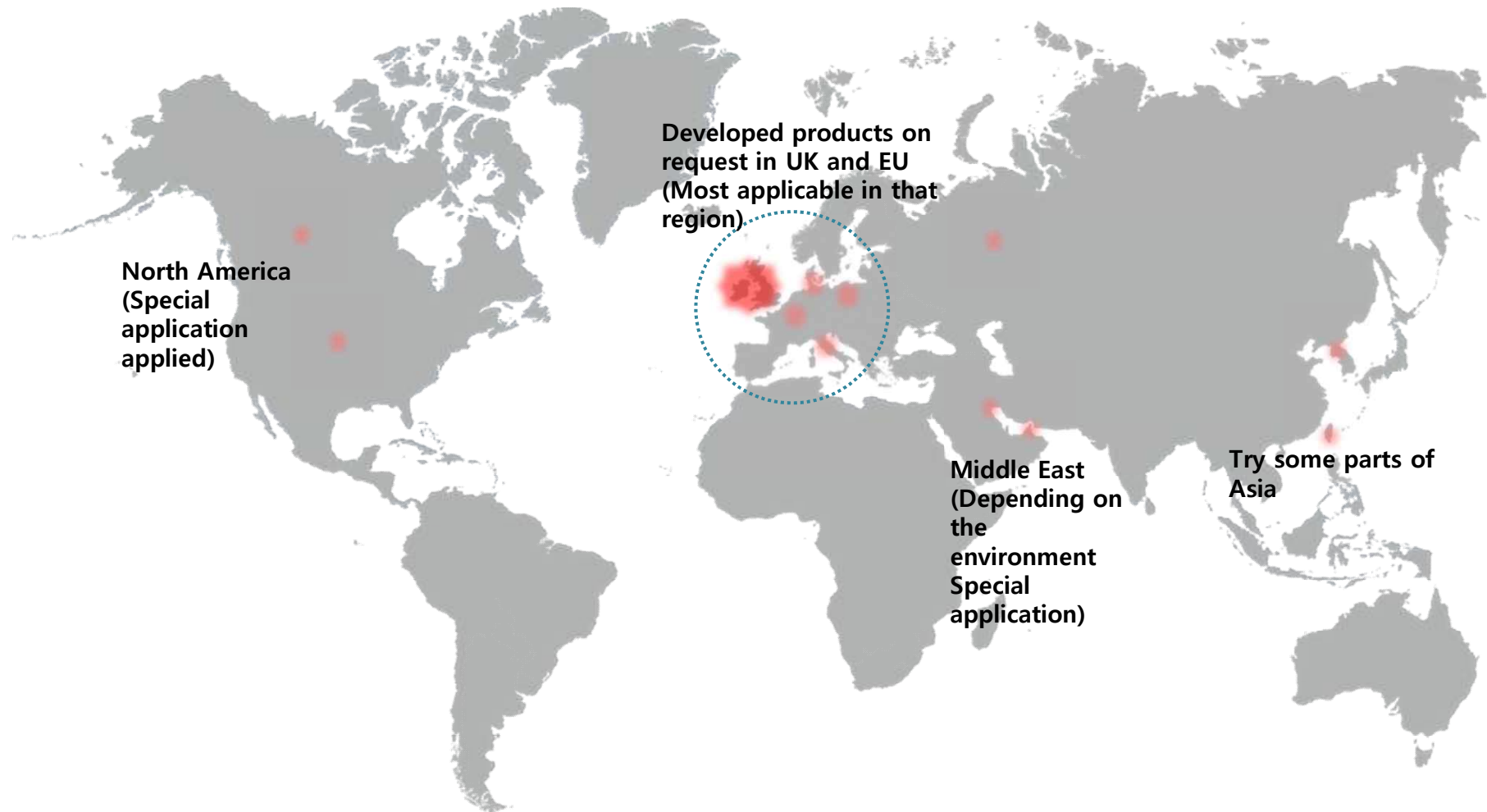
#### PCM's largest thick coating product

- 1) Production of 200 $\mu$ m single-sided painting products by 1Pass
- 2) Products capable of maximum thickening work in PCM product process
- 3) High Depth Embossing : Excellent texture effect by enabling high embossing within 70 $\mu$ m

#### Excellent physical properties

- 1) High durability: Up to 40 years warranty in Europe  
Applied mainly to areas with poor climatic environment and areas with a lot of sand wind
- 2) High handling : Chipping resistance, Scratch resistance  
Easy to work with difficult product processing/handling care
- 3) Chemical resistance, Wear resistance
- 4) Various colors and emboss patterns can be applied (Leather Pattern)
- 5) EN Standard. Ensure test quality
- 6) Remarks: Products developed at the request of European consumers, mainly in the UK

### 3. Application status by region

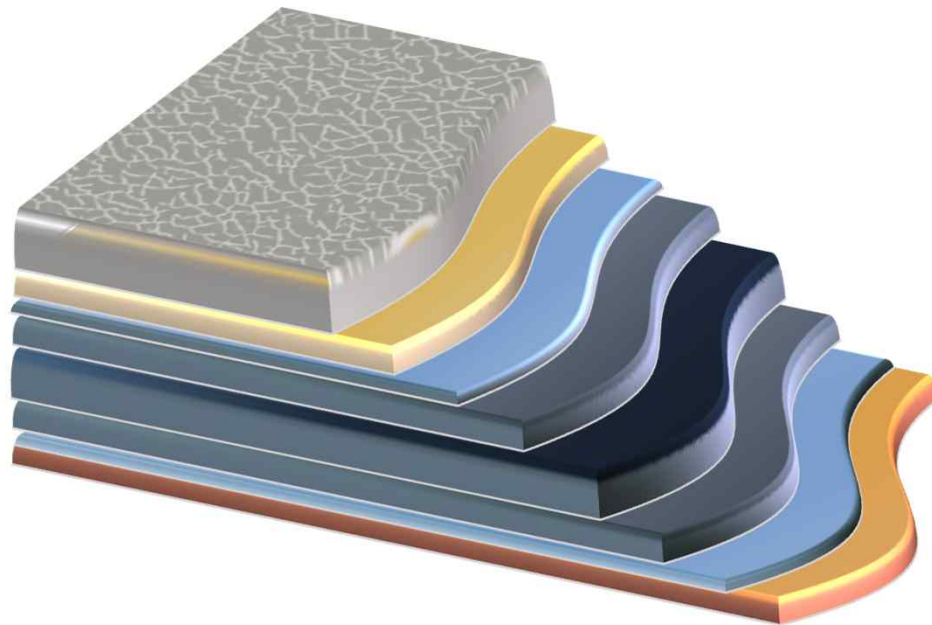








## 4. Product characteristics: EN standard quality secured

Items		Normal Type	Premium Type	Remark
Metallic Coating		GI, GL	GIX (Zn-Mg)	
Environmental issue		Phthalate Free	Phthalate Free	
Film thickness		Ave. 200 $\mu$ m	Ave. 200 $\mu$ m	EN 13523-1
Gloss (60°)		20~40%	20~40%	EN 13523-2
Emboss		Leather grain	Leather grain	
Abrasion resistance (CS-10, 1kg, 250rev)		10~15mg	10~15mg	EN 13523-16
Scratch resistance		> 5800	> 5800	EN 13523-12
Flexibility	(0T, 16°C)	No crack	No crack	EN 13523-7
	(1T, 0°C)	No crack	No crack	
Reverse impact		$\geq 18$ J	$\geq 18$ J	EN 13523-5
Adhesion (cross cut)		100%	100%	EN 13523-6
Corrosion resistance		1000 hours	1000 hours	EN 13523-8
Humidity resistance		1000 hours	1000 hours	EN 13523-26
UV resistance		2000 hours <b>RUV4</b> (color deviation<2, Gloss retention>80%)		EN 10169

## 5. Remark: (1) Sectional structure

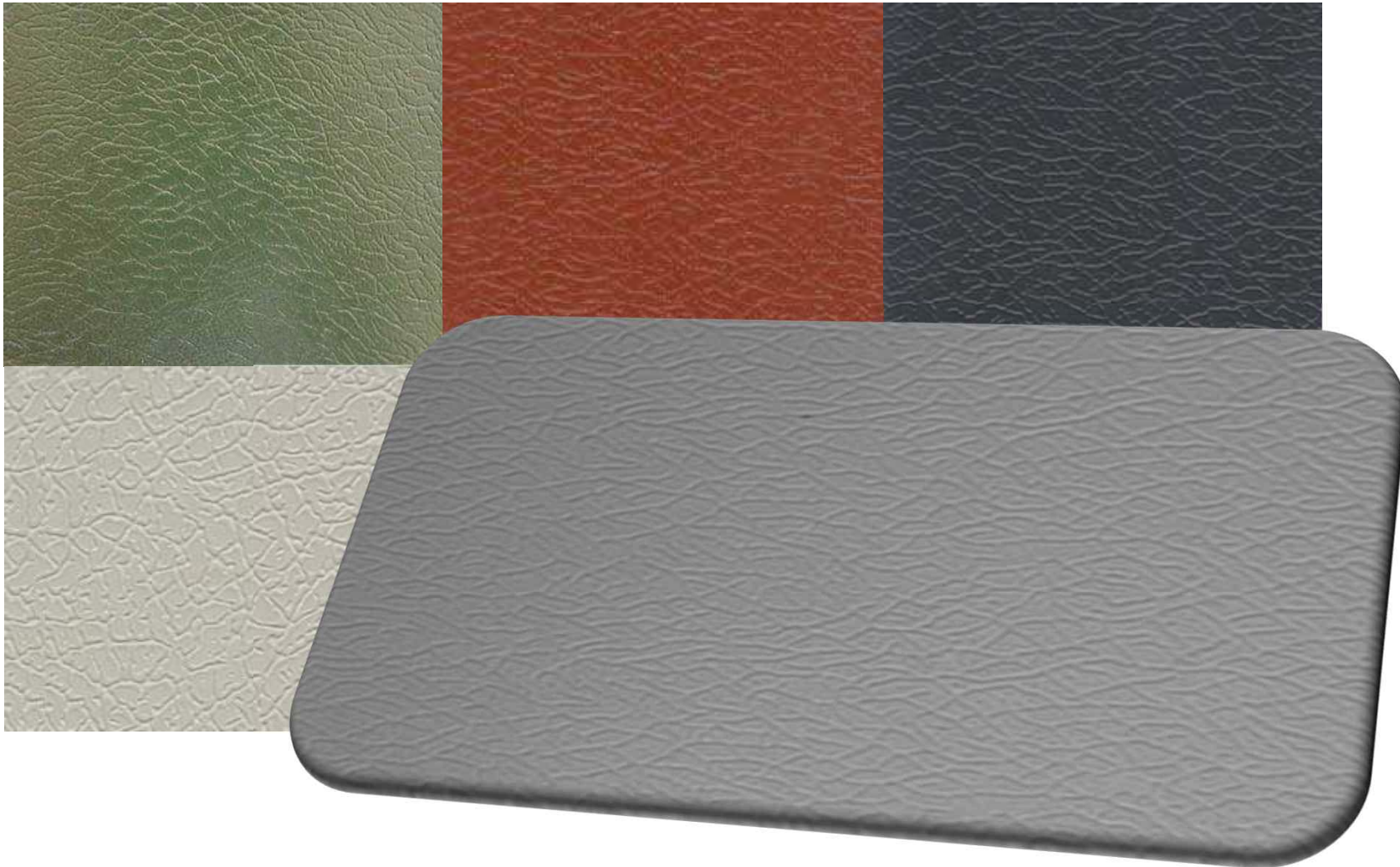
### PRODUCT LAYER



-  **Top Coating (Embossed PVC-SOL : 100~200 $\mu$ m)**
-  **Primer Coating (Acrylic Urethane Type ; High Adhesion, Corrosion resistance : 7 $\mu$ m)**
-  **Pre-treatment (Chromate)**
-  **\* GI / GL / Mg-Zn Alloy Metallic Coating**
-  **Base Substrate (Fe ; CR)**
-  **Back coating (Epoxy Type : 5~7 $\mu$ m)**

- \* Normal Type : GI or GL**
- \* Premium Type : GIX (Mg-Zn Alloy)**
- \* Film thickness: can be adjusted as required**

## 5. Remark: (2) Appearance



[ Lather grain Pattern /European building material appearance standard ]

: High depth coating emboss type, excellent texture effect



## 5. Remark: (3) Purpose



- Building exterior materials that require high durability  
: Panel Profile, Roof, etc.



- Corrugated steel pipe



- Freezer warehouse