

D-7 Plastisol

Guaranteed product with outstanding durability and performance for harsh environment.

Product Overview

D-7 Plastisol panels by Docherty Fabrications is a premium, high-performance coating system engineered specifically for demanding roof and wall cladding applications. Designed for long-term resilience, it offers **outstanding colour retention, exceptional corrosion resistance, and superior scratch resistance** even in the harshest environments.

With **high flexibility** and **excellent formability**, D-7 is ideal for complex profiles and fabrication processes. This phthalate-free system features a **robust 200-micron topcoat** applied to a **hot-dip galvanized or Galvalume steel substrate**, delivering an extended service life and consistent protection.



Core Advantages



Maximum durability

Luxsteel® Plastisol pre-painted steel combines outstanding performance with exceptional durability. You can rest assured that Luxsteel® Plastisol is built to last - and exhaustive testing proves that it does. With its market-leading performance, Luxsteel® Plastisol is suitable for many different construction applications.



Excellent corrosion resistance

It utilizes special metallic coated protective substrate that provides superior high levels of corrosion resistance.



High aesthetic appeal

10 standard colours are available in the palette, and all other colours can be accurately matched. The leathergrain pattern embossed surface offers a robust and aesthetically pleasing finish.



Eco-friendly

Luxsteel® Plastisol paint is free from potentially harmful phthalates and heavy metals to form a top coat system that out performs standard plastisol systems.



Warranty

Proven by scientific testing, we stand behind our Luxsteel® Plastisol with a comprehensive warranty for upto 30 years, subject to the conditions of the warranty, correct application and installation.



Internall use

Specification

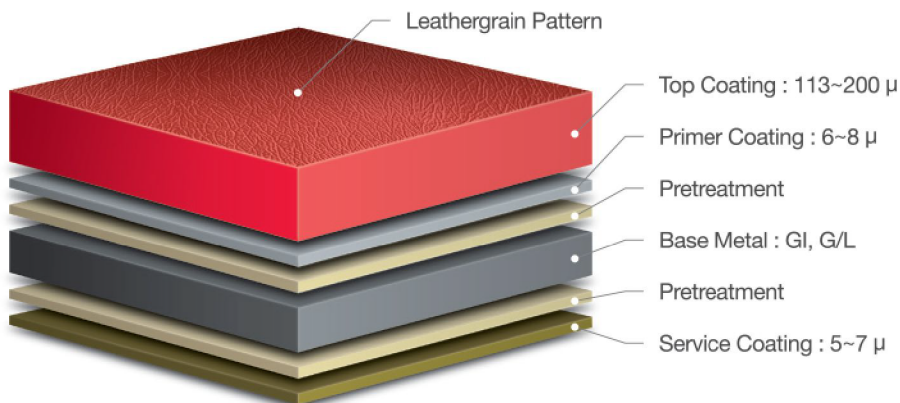
• Description

Thickness	200 microns
Color	Specific color on request
Appearance	Emboss
Production Size	- 0.3~1.2mm - 1,000~1,500mm

• Performance

Adhesion		4 point (Cross 5mm and Ericson 6mm)
Resistance to cracking on bending		≤ 1.5T - Bending Test
Impact resistance		No crack (1/2" × 500g × 50cmm)
Surface "Pencil" hardness		4 to 6B
Corrosion resistance		1,000 hours (In salt spray test)
Humidity resistance		1,500 hours
UV resistance	QUVA 2,000hrs	Color deviation Delta E : ≤ 3
	European EN 10169/2 category	RUV4
Resistance to acids and bases		Good
Resistance to solvents	Aliphatic and alcohols	Very Good
	Ketones	Low
	Aromatics	Good to Very Good
Resistance to mineral oils		Very Good

• Product Layer



Colour Palette





Product Data - PVC-SOL PPG SSC Plastisol Leathergrain



Product Options	Union 30
Topcoat - PVC-SOL Plastisol Paint	200 microns
Reverse - Universal Primer	7 microns
Emboss	Leathergrain
Reverse Colour - Epoxy Primer : 12 µm	Any

Typical Properties	TEST STANDARD	
Nominal organic coating thickness (microns)	200	EN 13523-1 - Film Thickness
Specular gloss (60°):		
Non-matt colours %	40~50%	EN 13523-2 - Gloss
Matt colours %	10~13%	
Scratch resistance (g)	>5000	EN 13523-12 - Resistance to scratching
Abrasion resistance		
(Taber, 250 rev, 1 kg) - mg	<12	EN 13523-16 - Resistance to abrasion
Falling Sand Abrasion Test - Method A	<500L	ASTM D968-93 - Abrasion Resistance of Organic Coatings by Falling Abrasive
Maximum continuous operating temperature (°C)	80°C	

Fire performance		
Reaction to fire	B-s2, d0	BS EN 13501-1:2007+A1:2009 - Fire classification of construction products and building elements. Classification using test data from reaction to fire tests
EN 13823: 2010 (SBI) - Single Burning Item test		
EN ISO 11925-2: 2002 - Ignitability test		

Flexibility		
Minimum bend radius (T)	0T (16°C) 1T (0°C)	EN 13523-7 - Resistance to cracking on bending (T-bend test)
Reverse impact (J)	≥ 18	EN 13523-5 - Resistance to rapid deformation (impact test)
Adhesion (cross hatch) %	100	EN 13523-6 - Adhesion after indentation (cupping test)

Corrosion resistance:		
Salt spray (hours)	1000	EN 13523-8 - Resistance to salt spray (fog)
Condensation (hours)	1500	EN 13523-26 - Resistance to condensation of water
Humidity (hours)	5000	EN 13523-25 - Resistance to humidity
Corrosion resistance category	RC5	EN 10169 - Technical delivery conditions
UV resistance category	Ruv4	

	Maximum average edge delamination (mm)	Maximum average scribe delamination (mm)	
Accelerated corrosion tests			
Salt Spray - 1000 hours	<2mm	<1mm	EN 13523-8 - Resistance to salt spray (fog)
Prohesion - 1000 hours	<2mm	<2mm	EN ASTM G85A5
Water soak - 1000 hours	0mm	0mm	EN 13523-9 - Resistance to water immersion
Humidity - 1000 hours	0mm	0mm	EN 13523-26 - Resistance to condensation of water
CPI5 Rating (Blistering category) - minimum 1500 hours EN 13523-26	Less than Category 2 (S2)		EN ISO 4628-2 - Evaluation of degradation of coatings
Kesternich - 20 cycles	<3mm	<3mm	EN 13523-23 - Colour stability in humid atmospheres containing sulfur dioxide

Permeability to Water vapour and Oxygen		
Water Vapour Transmission (grams/m2/24 hours) - Test B	17.02	ASTM D1653 - Water Vapor Transmission of Organic Coating Films
Oxygen permeability (m2/sec/Pascal) - 23°C with Oxygen at 1 Bar	TBA	BS ISO 2782:2006 - Determination of permeability to gases

Date: 01/02/2017

Version: One

DUFERCO UK LTD



By:

Name (Print): David Mann

Title: Technical

Date: 2017.01.30

PPG SSC Co., Ltd

By:

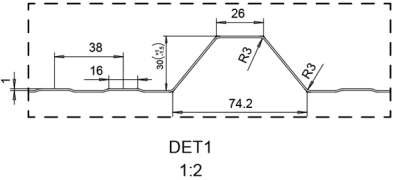
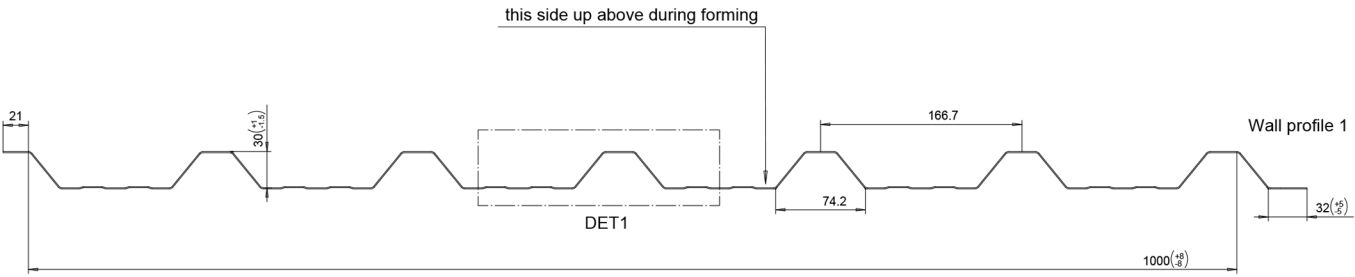
Name (Print): Hong, Sung Bo

Title: Tech team manager

Date: 2017.01.30



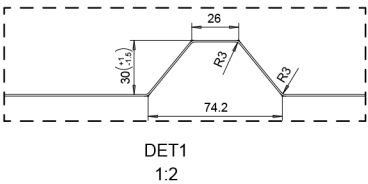
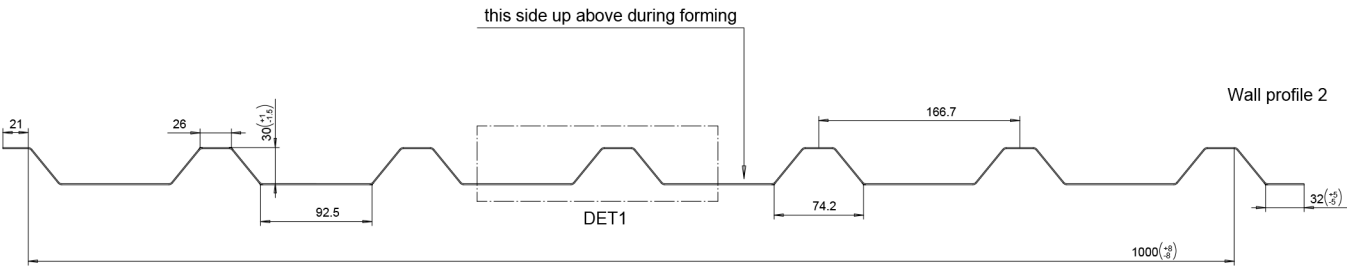
D-32 W/S



Raw material width 1250 mm
Raw material thickness 0.45-0.7mm
Raw material quality S280GD+Z-320GD+Z
Tolerances according to EN508-1



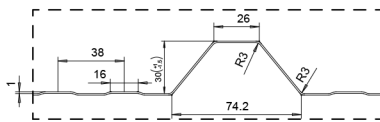
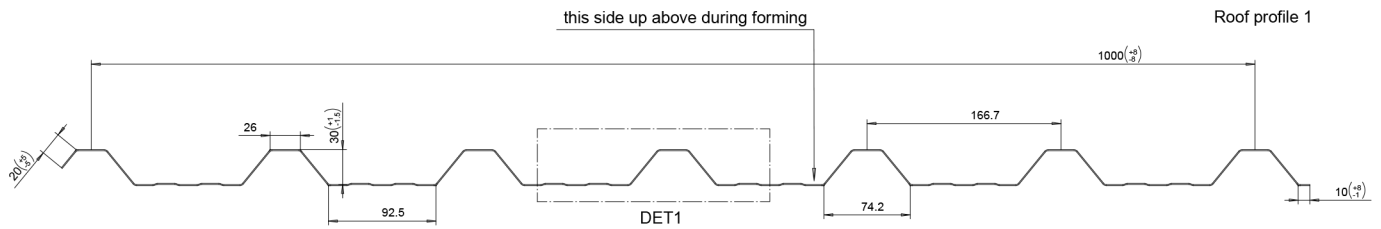
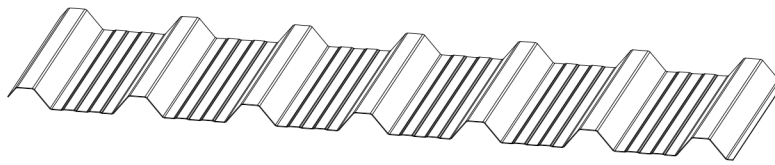
D-32 Wall



Raw material width 1250 mm
Raw material thickness 0.45-0.7mm
Raw material quality S280GD+Z-320GD+Z
Tolerances according to EN508-1



D-32 R/S

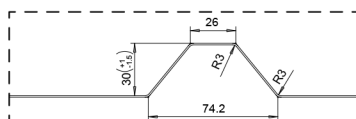
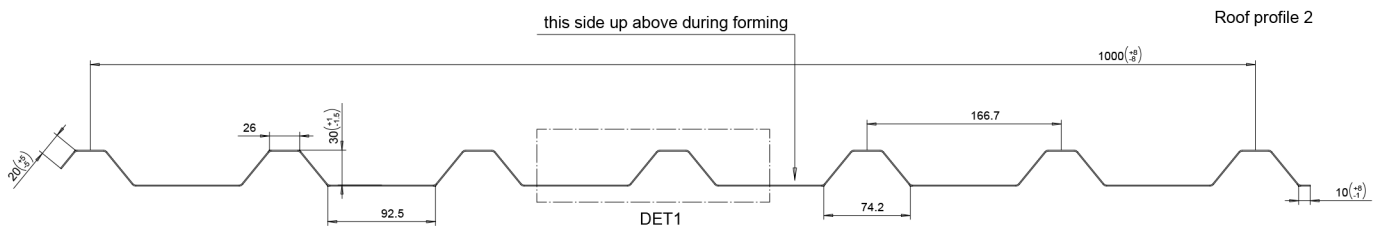
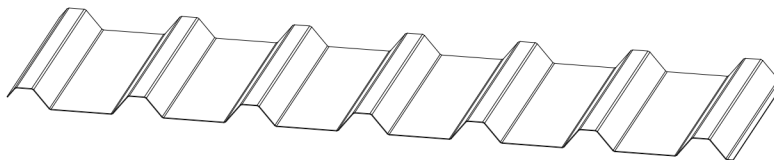


DET1
1:2

Raw material width 1250 mm
Raw material thickness 0.45-0.7mm
Raw material quality S280GD+Z-320GD+Z
Tolerances according to EN508-1



D-32 Roof



DET1
1:2

Raw material width 1250 mm
Raw material thickness 0.45-0.7mm
Raw material quality S280GD+Z-320GD+Z
Tolerances according to EN508-1