

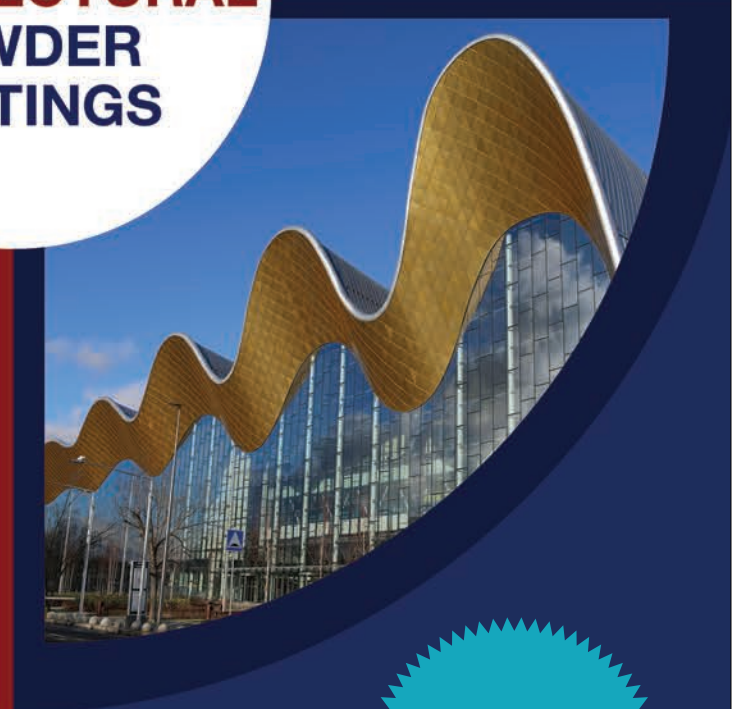


DURABERG

Durable Polyester Powder Coatings



**SUPER
DURABLE
ARCHITECTURAL
POWDER
COATINGS**



**Antimicrobial
variant is also
available#**

DURABERG

Aesthetics as well as protection are the key features of modern construction. These aspects are built in Berger's DURABERG range of powder coatings.

To extend the support in the growing sustainable architectural market globally, Berger Paints India Ltd. has come up with new ranges of Durable Polyester Powder Coatings. The products are designed for both interior and exterior applications. All 'DURABERG' products are supported by Berger Paints' warranty when applied by Duraberg approved applicator and following Berger recommended application methodology**.

Berger offers two series of products in DURABERG. D5000 Series and SD10000 Series have warranties for 5 years and 10 years respectively.

TECHNICAL ATTRIBUTES

| Parameters | D5000 Series | SD10000 Series |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Chemistry | Durable Polyester | Super Durable Polyester |
| Aesthetics / finish | Available in Glossy, Semi-glossy, Matt, Texture, Metallic finishes | |
| Specification | As per Technical Data Sheet | Meets Qualicoat Class 1* AAMA 2603* |
| Weathering performance | 600 – 800 hours Xenon Arc | 1 year natural weathering |
| Warranty | 5 Years | 10 Years |
| Recommendation & Application | Indoor & Out door applications Residential Constructions, Office partitions | Indoor & Out door applications High-end Residential & Commercial constructions. |
| Compliance | RoHS compliant, VOC-free odourless coatings system. | |
| *Along with execution at Berger's Central R&D, tests were performed & certified by India's most reputed Chemical Technology Institute in Mumbai; complying to Qualicoat & AAMA Technical Specifications. | | |

**Application Methodology includes suitable surface preparation followed by recommended DURABERG application procedures

SUBSTRATE & APPLICATION DETAILS

SUBSTRATES & SURFACE PREPARATION:

a. Substrates:

- Powder coating to apply on 0.8 or 1 mm thick AlMg1– semi hard substrate to conduct mechanical and long term.

Note: The chemical composition of the samples has an influence on the final results, especially in corrosion tests.

b. Surface Preparation:

- As per PT supplier's guidelines, the parameters like pointage etc. of each pre-treatment bath should be maintained scientifically on daily basis to get uniform surface preparation and excellent product performance.
- The substrates must be thoroughly clean, free from grease, oil, rust, mill scale or any other foreign contaminations. Cleaning may be carried out either by shot blasting or solvent or chemical degreasing and followed by to conduct Chromatization process.
- The recommended coating weight is 0.4 - 1.0 gm/sq. meter or follow the PT supplier's recommendation.
- After that those pre-treated substrates have to be dried ideally to remove water, moisture prior to powder coating.
- The pre-treated substrates should be coated immediately or stored at dry areas for minimum time span (max. 3 – 5 hours after pre-treatment process).

APPLICATION GUIDELINES:

a. Application of Powder Coating:

DURABERG products can be applied by Corona electrostatic equipment. We recommend the following.

- Substrates should be grounded properly with zig/hangers
- Voltage and Current should be set in between 45 - 90 kV & 10 – 30 μ A respectively based on powder coatings e.g., solid colours, metallic shades etc.
- Distance between gun & profiles should be 15 to 25 cm or it depends up on the profiles' geometry.
- To use flat jet spray nozzles or as required by the shape & geometry of the profiles.
- Direct powder application from carton is not recommended, the powder should be charged into a fluidization hopper to get proper powder fluidity.

b. Baking/Curing of Powder coating:

Types of Oven: Electric, Gas or Diesel fired oven

- Gas or Diesel fired ovens must be constructed along with Heat Exchanger, fan to have uniformity of inside temperature.
- Coated profiles have to be cured as per recommended baking schedule.
- Travel Temperature Recorder (TTR) should be carried out quarterly to maintain the ideal oven profile.

COLOUR AVAILABILITY

Apart from the shades available in the shade card, we can offer the entire series in RAL, NCS, Pantone, IS etc. Customization in shades available on request.



Semi Glossy 579
RAL 9003



Matt 057
RAL 9016



Semi Glossy 067
RAL 9016



Texture AW1
RAL 9016



Semi Glossy 577
RAL 9010



Matt 056
RAL 9010



Semi Glossy 069
RAL 9001



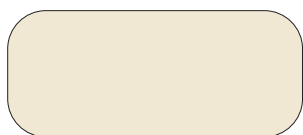
Semi Glossy 393
RAL 9002



Semi Glossy 564
RAL 9018



Semi Glossy 359
RAL 7035



Semi Glossy 117
RAL 1013



Semi Glossy 518
RAL 7038



Semi Glossy 383
RAL 7032



Texture 384
RAL 7032



Semi Glossy 519
RAL 7044



Semi Glossy AV4
RAL 7001



Semi Glossy AW2
RAL 7004



Texture AV2
RAL 7004



Semi Glossy Met 113
RAL 9006



Semi Glossy 572
RAL 7040



Semi Glossy 431
RAL 7030



Semi Glossy AV9
RAL 7036



Semi Glossy 497
RAL 7033



Semi Glossy Met 081
RAL 9007



Texture AV7
RAL 7011



Semi Glossy AV6
RAL 7011



Semi Glossy AV8
RAL 7012



Semi Glossy 385
RAL 7043



Semi Glossy Met
Hamley Gold AW0



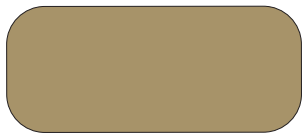
Semi Glossy
RAL 1001 111



Semi Glossy Met
Champagne 826



Matt
Greystone Celler 148



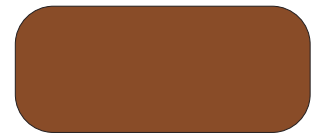
Semi Glossy Met
RAL 1035 110



Texture Met
HD Pearl Grey 089



Semi Glossy
RAL 1011 AV3



Semi Glossy
RAL 8003 180



Semi Glossy
RAL 3005 624



Matt
RAL 8016 340



Semi Glossy
RAL 8017 156



Matt Met
Anodic Bronze 119



Semi Glossy
RAL 7015 528



Semi Glossy
RAL 7022 409



Semi Glossy
RAL 8014 170



Semi Glossy
RAL 8019 355



Semi Glossy
RAL 5015 582



Semi Glossy
RAL 5017 611



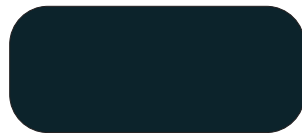
Semi Glossy
RAL 5005 580



Semi Glossy
RAL 5003 583



Semi Glossy
RAL 6005 082



Matt
RAL 7021 556



Semi Glossy
RAL 9005 140



Matt
Anodic Black 120

SAFETY & STORAGE CONDITION

- a. **Safety Precaution:** This is for Industrial use only, kindly go through the MSDS of individual products.
- b. **Storage Condition:** Keep in cool & dry condition below 25°C & 50% relative humidity ideally.

Disclaimer: This shade card is indication of shade only. Hence it is better & recommended to consider fresh powder coated panels for actual colour & finish assessment.

#DURABERG range of products can also be made available with Antimicrobial property following test protocol JIS Z 2801 : 2012

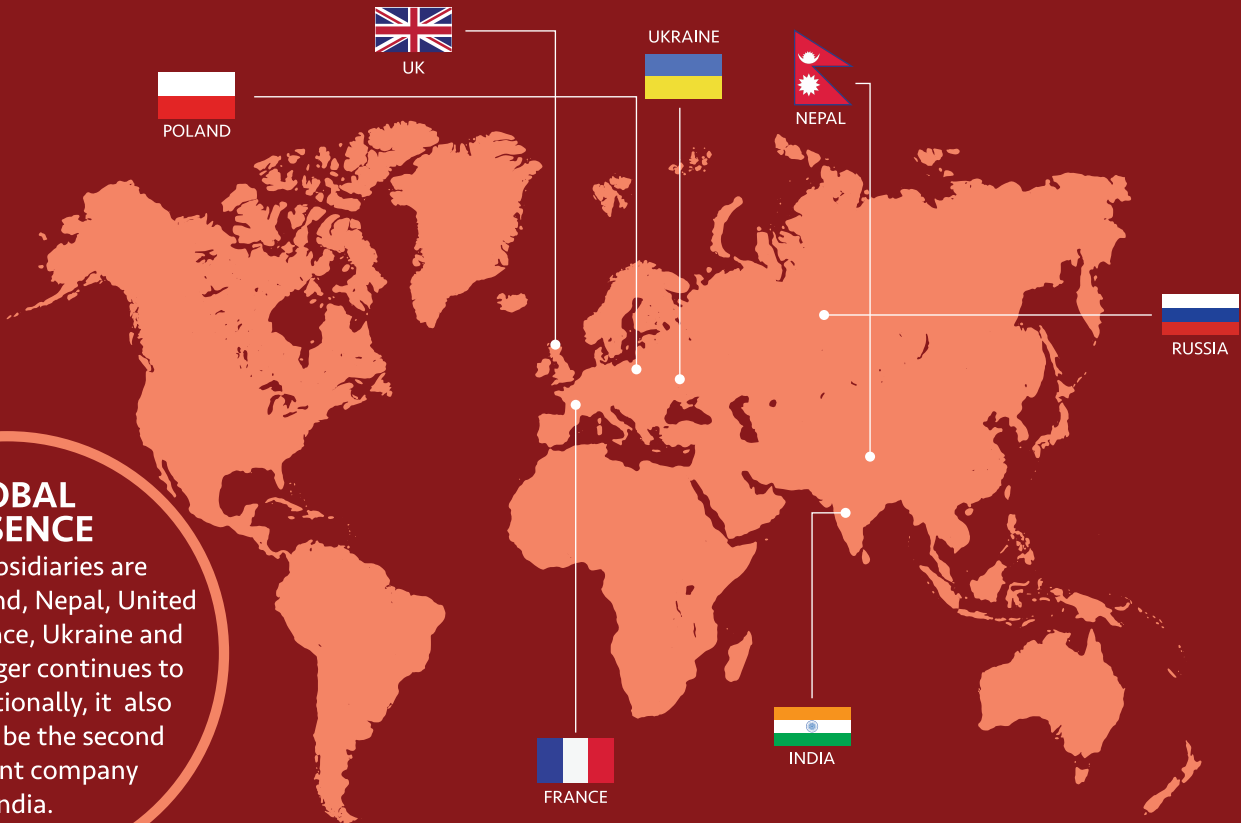
**Product Performance Report of DURABERG SD10000 Series Powder Coatings
as per Qualicoat Class 1 Specification**

| PARAMETERS | STANDARD | SPECIFICATION | DURABERG PURE POLYESTER GLOSSY PRODUCTS | DURABERG PURE POLYESTER MATT PRODUCTS |
|---------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|
| Substrate | Qualicoat | AlMg1 – semi hard of thickness of 0.8 - 1 mm. | On 0.8 mm thick Panel | On 0.8 mm thick Panel |
| Gloss | ISO 2813/ ASTM 523 | > 70 GU for Glossy < 30 GU for Matt | 83 ± 10 GU | 24 ± 5 GU |
| Coating thickness (mic) | ISO 2360/ ASTM 1186 | 60 - 80 micn | 65 ± 5 µm | 65 ± 5 µm |
| Dry adhesion | ISO 2409/ ASTM D 3359 | GT = 0 | Passes | Passes |
| Buchholz indentation | ISO 2815 | Minimum 80 mm on required thickness. | Passes | Passes |
| Cupping test | ISO 1520/ ASTM 643 | 5 mm to pass | Passes | Passes |
| Flexibility / bend test | ISO 1519/ ASTM D522 | 5 mm to pass | Passes | Passes |
| Impact test | ISO 6272/ ASTM D2794 | 25 - 30 Kg.Cm to pass | Passes | Passes |
| Polymerisation test - xylene | --- | No softness, gloss reduction, after immediate test and 30 min. | Passes | Passes |
| Resistance to humid atmospheres | ISO 3231 | 1000 hours to pass | Passes | Passes |
| Acetic acid salt spray resistance | ISO 9227 | 1000 hours to pass | Passes | Passes |
| Accelerated weathering test (1000 hours xenon arc test) | ISO 16474-2/ ASTM 7869 | 50% gloss retention after 1000 hours to pass | Passes - More than 80% gloss retention. | Passes - More than 80% gloss retention. |
| Resistance to mortar | EN 12206-1 par. 5.9/ ASTM C207 | Mortar should be removed easily without leaving any residues after 24 hours. No mechanical damage to the organic coating caused by grains of sand. | Passes | Passes |
| Resistance to boiling water | --- | On visual inspection, there shall be no sign of detachment or blistering after 2 hours. Some colour change is acceptable. | Passes | Passes |
| Constant climate condensation water test | ISO 6270 | Humidity test - 1000 hours | Passes | Passes |
| Natural weathering test | ISO 2810 | 50% gloss retention after 12 months | Panels - More than 70% Gloss retention. | Panels - More than 75% Gloss retention. |

Comments - The products of Berger DURABERG SD10000 Glossy, Matt and also Semi Glossy series meet as per Qualicoat Class 1 Specification.

This has been Tested & Certified by India's Most Reputed Chemical Technology Institute in Mumbai.

GLOBAL PRESENCE
 Berger's subsidiaries are present in Poland, Nepal, United Kingdom, France, Ukraine and Russia. As Berger continues to grow internationally, it also continues to be the second largest paint company in India.



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 E-mail : consumerfeedback@bergerindia.com

REGIONAL PRESENCE IN INDIA

KOLKATA

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 Phone : 033 - 22848120 / 22848012

MUMBAI

8th floor, Windfall Building, Sahara Plaza, J B Nagar,
 Andheri (E), Mumbai - 400 059, Phone : 022 - 28342001 / 02

PUNE

Survey No. 164, Khutwad Warehouse, Phursungi, Pune – 412 308
 Phone : +91 86699 87702 / 04

DELHI

D-14/2, Okhla Industrial Area, Phase-II,
 New Delhi – 110 020, Phone : 011 - 26384796 / 26386008

GURUGRAM

Kataria Complex, Daulatabad Road Industrial Area,
 Gurugram - 122 001, Phone : 0124 - 2255471 / 2255472

CHANDIGARH

Plot No. 823, Industrial Area. Phase-2, Chandigarh – 160 002
 Phone : 0172 - 2637181 / 4670401

BANGALORE

Plot No. 32, Phase III, Peenya Industrial Area,
 Bangalore – 560 058, Phone : 080 - 28377778 / 28377668

COIMBATORE

9/1A2, Thudiyalur Post, Rangavale Compound, MTP Road,
 Coimbatore – 641 034, Phone : 0422- 4035965 / 4035980

HYDERABAD

Plot No.5, Opp. IDPL Company, Beside Tibcon Capacitor, Balanagar,
 Hyderabad - 500 037, Phone : 040 – 29804277 / 29804288

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