

# Direct-To-Metal

## Alkyd Enamel Semi-Gloss

B55-100 Series


**SHERWIN  
WILLIAMS®**

### CHARACTERISTICS

**DIRECT-TO-METAL ALKYD ENAMEL** is a high-build alkyd coating with rust-inhibitive properties for application directly to bare steel.

#### For use on properly prepared

Structural Steel, Previously painted, Primed Galvanized & Aluminum,

#### Features:

- Good gloss and color retention
- Corrosion resistance and finish coat protection in one product
- Excellent application properties
- Excellent block resistance
- Suitable for use in USDA inspected facilities

#### Recommended for use in:

- Interior-exterior • New construction • Railings
- Machinery • Structural Steel • Steel doors • Steel decking • Primer Finish • Repaints • Storage tanks
- Bar joists • Piping • Fire escapes • Conveyors

**Color:** Pure White, Deep and Ultradeep base

#### Recommended Spreading Rate per coat:

Wet mils: 7.0-13.0

Dry mils: 3.0-5.6

Coverage sq. ft. per gallon 123-229

**Theoretical coverage:** sq. ft. 689

per gallon @ 1 mil dry

Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

#### Drying Schedule @ 7.0 mils wet, @ 50% RH:

@77°F @120°F

To touch 1-3 hours 1 hour

To handle 4-6 hours 1.5 hours

To recoat 18 hours 18 hours

Drying, and recoat times are temperature, humidity, and film thickness dependent.

#### Tinting with BAC:

Base	oz. per gallon	Strength
Pure white	0-5	SherColor
Deep Base	4-11	SherColor
Ultradeep Base	10-11	SherColor

Check color before using. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

**Finish:** 50-60°@60° Semi-Gloss

#### Pure White B55W00101

(may vary by color)

#### V.O.C. (less exempt solvents):

448 grams per litre; 3.68 lbs. per gallon

As per 40 CFR 59.406

**Volume Solids:** 43 ± 2%

**Weight Solids:** 59 ± 2%

**Weight per Gallon:** 9.08 lb

**Flash Point:** 101°F PMCC

**Shelf Life:** 36 months, unopened

### COMPLIANCE

As of 07/01/2021, Complies with:

<b>OTC</b>	No
<b>OTC Phase II</b>	No
<b>S.C.A.Q.M.D.</b>	No
<b>CARB</b>	No
<b>CARB SCM 2007</b>	No
<b>CARB SCM 2020</b>	No
<b>Canada</b>	No
<b>LEED® v4 &amp; v4.1 Emissions</b>	No
<b>LEED® v4 &amp; v4.1 V.O.C.</b>	No
<b>EPD-NSF® Certified</b>	No
<b>MIR-Manufacturer Inventory</b>	No
<b>MPI®</b>	Yes

### APPLICATION

#### Temperature:

minimum 40°F / 4.4°C

maximum 120°F / 49°C  
air, surface, and material

At least 5°F above dew point

**Relative humidity:** 85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

**Reducer:** Not recommended

#### Airless Spray:

Pressure 2400 p.s.i.

Hose 3/8 inch I.D.

Tip .019 inch

#### Conventional Spray:

Gun Binks 95

Fluid Nozzle 63 B

Air Nozzle 63 PB

Atomization Pressure 50 p.s.i.

Fluid Pressure 20-25 p.s.i.

**Brush** Natural Bristle

**Roller Cover** 3/8 inch woven with solvent resistant core

If specific application equipment is listed above, equivalent equipment may be substituted.

Apply paint at the recommended film thickness and spreading rate as indicated. Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness, or porosity of the surface, skill, and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, over thinning, climatic conditions, and excessive film build.

Mix paint thoroughly to a uniform consistency with slow speed power agitation prior to use.

Stripe coat crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

### SPECIFICATIONS

#### Steel Light Service:

1 coat Direct-To-Metal Enamel

#### Steel Moderate Service:

2 coats Direct-To-Metal Enamel

#### Steel Alkyd Primer:

1 coat Kem Bond HS Primer

or

1 coat Kem Kromik Universal Metal Primer

1 coat Direct-To-Metal Enamel

#### Steel Acrylic Primer:

1 coat Pro Industrial Pro-Cryl Primer

1 coat Direct-To-Metal Enamel

#### Aluminum:

1 coat Pro Industrial Pro-Cryl Primer

1 coat Direct-To-Metal Enamel

#### Galvanizing:

1 coat Pro Industrial Pro-Cryl Primer

1 coat Direct-To-Metal Enamel

The systems listed above are representative of the product's use, other systems may be appropriate. Other primers may be appropriate.

# Direct-To-Metal

## Alkyd Enamel Semi-Gloss

### SURFACE PREPARATION

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at **1-800-424-LEAD** (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

**Iron & Steel** - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel within 8 hours or before flash rusting occurs.

**Aluminum** - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Primer required.

**Galvanizing** - Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. When the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned. Primer required.

**Concrete and Masonry** - For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI 03732, CSP 1-3. Surfaces should be thoroughly cleaned and dry. Surface temperatures must be at least 55°F before filling. If required for a smoother finish, use the recommended filler/surfacer. The filler/surfacer must be thoroughly dry before topcoating per manufacturer's recommendations. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations. Primer required.

**Drywall** - Must be clean and dry. All nail heads must be set and spackled. Joints must be taped and covered with a joint compound. Spackled nail heads and tape joints must be sanded smooth and all dust removed prior to painting. Exterior surfaces must be spackled with exterior grade compounds. Primer required.

**Wood** - Surface must be clean, dry, and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Primer required.

### SURFACE PREPARATION

**Previously Painted Surface** - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

**Mildew** - Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised. Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

### PERFORMANCE

Pure White B55W00101

**System Tested:** (unless otherwise indicated)

**Substrate:** Steel

**Surface Preparation:** SSPC-SP10

**Primer:** 1 coat Kem Bond HS @ 1.9 Mils D.F.T.

**Finish:** 1 coat Direct-To-Metal @ 3.0 Mils D.F.T.

**Abrasion Resistance:**

**Method:** ASTM D4060  
**Result:** 138 mg loss

**Adhesion:**

**Method:** ASTM D4541  
**Result:** 709 p.s.i.

**Corrosion Weathering:**

**Method:** ASTM D5894, 10 cycles  
**Result:** Rating 9, per ASTM D714 for Blistering. Rating 9 per ASTM D1654 for corrosion

**Direct Impact Resistance:**

**Method:** ASTM D2794  
**Result:** 56 inch lb.

**Dry Heat Resistance:**

**Method:** ASTM D2485  
**Result:** 200°F

**Flexibility:**

**Method:** ASTM D522, 1/8 inch mandrel  
**Result:** Pass

**Humidity Resistance:**

**Method:** ASTM D4585, 500 hours  
**Result:** Rating 6 per ASTM D714 for blistering. Rating 10 per ASTM D1654 for corrosion

**Pencil Hardness:**

**Method:** ASTM-D3363  
**Result:** HB

Do not use colorants formulated for interior use only.

During the early stages of drying, the coating is sensitive to rain, dew, high humidity and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

### SAFETY PRECAUTIONS

Before using, carefully read **CAUTIONS** on label. Refer to the Safety Data Sheets (SDSs) before use.

#### **FOR PROFESSIONAL USE ONLY.**

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

### CLEANUP INFORMATION

Clean spills, spatters & tools with compliant cleanup solvent. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

**DANGER:** Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

HOTW	07/01/2021	B55W00101	45 441
HOTW	07/01/2021	B55W00113	23 445
HOTW	07/01/2021	B55T00104	40 442