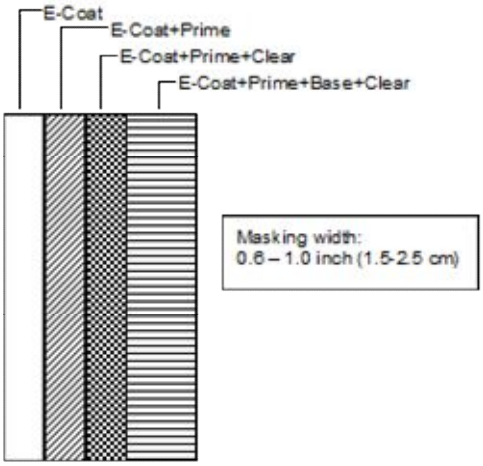
BYK-Gardner USA 3800 Monroe Ave., Pittsford, NY 14534 USA
Tel: +1 (585) 264-0480 Fax: +1 (585) 264-9642

How to Make Steel and Aluminum PELT System Calibration Panels

Panel Preparation

- Use standard NON-GALVANIZED 12" x 4" (30cm x 10cm) steel panels. Larger sizes are OK.
- Apply heat-resistant tape to the back of the panel prior to the application of E-Coat to create an area of bare steel (a 1" square area or larger is optimal). Leave the tape on the back of the panel for the entire process.
- Every coating must be applied in process, including E-Coat. Get a good ground when applying E-Coat. Verify the resulting E-Coat thickness is greater than or equal to 0.60 mils (15 microns) before the application of remaining coatings.
- For each color provide a panel that was coated on a horizontal surface and a panel that was coated on a vertical surface if possible.
- **Important:** DO NOT bake the Basecoat before application of Clearcoat. After E-Coat, mask off first section, then apply Prime. After Prime, mask off second section. Mask off third section, making sure tape can be pulled off. Apply basecoat, pull off the third strip of tape, then apply Clearcoat. Bake in process ovens. The panel should look like the following diagram:

Clearcoat/Basecoat/Prime/E-Coat



Minimum film builds for calibration:	
Clearcoat	1.25 mils (32 microns)
Basecoat	0.50 mils (13 microns)
Primer	0.50 mils (13 microns)
E-Coat	0.60 mils (15 microns)

Important Notes

- If you have a PELT gauge, we strongly recommend using it to measure the calibration panels before sending them to ensure adequate thickness of each layer (peaks representing each layer are present). **Note: If the PELT operator is uncertain whether the panels are okay based on PELT waves, a job file can be e-mailed to the PELT Calibration Lab for confirmation at the e-mail address below.**
- Panels must be prepared to the above specifications for our standard calibrations, which are generated using both magnetic induction and microscope data. If panels are not masked, calibrations will be generated using microscope data only.
- Panels not prepared to the above specifications may not be usable for calibration.

Shipping

Send PELT calibration panels to:

BYK-Gardner USA
Attn: PELT Calibration Lab
3800 Monroe Ave, Dock 29A
Pittsford, New York 14534 USA

Process and Product Information Sheets can be shipped with panels, faxed, or e-mailed to
BYK.PELTCalibration@altana.com

PELT Gauge Calibration Sample
Process and Product Information Sheet

Your samples will be used by BYK-Gardner to determine film build calibrations for use with the PELT Gauge. To achieve the highest degree of calibration accuracy, the samples must be run through the actual production process. Samples may be manual sprayed in *production booths* (using production material) and baked in the process (by placing panels on units). Lab sprayed samples should be avoided. **One copy of this form should be provided for each film build.**

Customer: _____ Date: _____

Prepared by: _____ Substrate: _____

If using a PO for payment, enter PO# submitted to BYK-Gardner: _____

Our lab will send an e-mail upon receipt of your samples, indicating their status and when possible, the planned completion date of your calibrations. Please fill in contact information for the person to be notified:

Contact Name: E-mail address:

E-Coat / Conductive Prime

Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

Primer / Adhesion Promoter (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Prime color: _____ Initials: _____

Basecoat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Color code: _____ Initials: _____

Color name: _____ ☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know

Clearcoat (Check One)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

I certify that the submitted sample is the closest achievable representation of the actual production process.

_____ _____

Name Date

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Prepared by: _____ Substrate: _____

If using a PO for payment, enter PO# submitted to BYK-Gardner: _____

Our lab will send an e-mail upon receipt of your samples, indicating their status and when possible, the planned completion date of your calibrations. Please fill in contact information for the person to be notified:

Contact Name: E-mail address:

E-Coat / Conductive Prime Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

Primer 1 (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Prime color: _____ Initials: _____

Primer 2 (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Prime color: _____ Initials: _____

Basecoat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Color code: _____ Initials: _____

Color name: _____ ☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know

Clearcoat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

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Our lab will send an e-mail upon receipt of your samples, indicating their status and when possible, the planned completion date of your calibrations. Please fill in contact information for the person to be notified.

Contact Name: _____ E-mail address: _____

E-Coat / Conductive Prime

Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

Primer / Adhesion Promoter (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Prime color: _____ Initials: _____

Ground-coat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Mid-coat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Color code: _____ Initials: _____

Color name: _____ ☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know

Clearcoat (Check one)

☐ Waterborne ☐ Solvent borne ☐ Powder ☐ Other Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

I certify that the submitted sample is the closest achievable representation of the actual production process.

_____ _____

Name Date