


Revision No. 2	Page 1 of 3	Technical Definition
		
Kit 10-8 2018 PTP Metallic		
Layer Thickness measurement – Aluminium painted panels		

You shall respect the HSE policy of your laboratory for each performed test.

Instructions to participant laboratories

Please read these instructions carefully BEFORE starting the tests.

1. 3 specimens (80 x 50 x 1 mm) are supplied to each participant.
 - PI1 specimen without any coatings or treatments
 - PI2 specimen with Unsealed CAA + Primer
 - PI3 specimen with Unsealed CAA + Primer + Top coat

In case of :

- loss or deterioration of PTP sample(s) please contact your sponsor for replacement kit.
- exclusion of a test specimen results by yourself, you shall provide a short root cause analysis.

2. Each participant is required to determine the thicknesses of layers for each specimen as indicated below:

Eddy currents method

The thickness of the coating shall be measured in accordance with **AITM 6-6006 Issue 3** “Measuring coating thickness by equipments of the magnetic and eddy current type”. The baseline shall be performed on untreated specimen (PI1) and at least 3 measurements shall be made on each layer. Thus, the CAA, primer and top coat thickness will be determined (PI2 & PI3).

Microscopic method – only for Test Specimen PI3 (not mandatory if you are not qualified by your sponsor for using this measurement method)

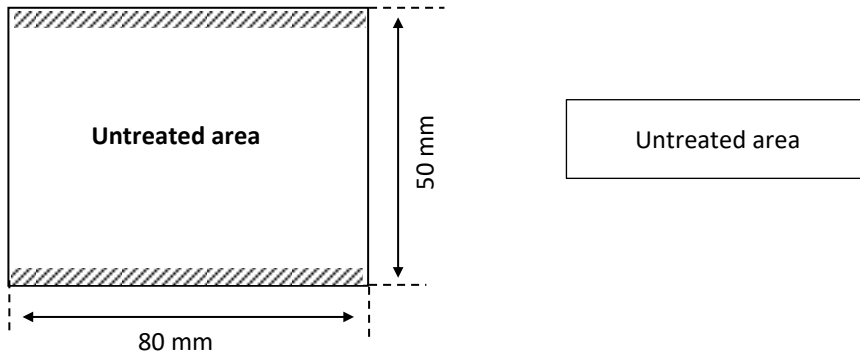
A cross section shall be performed on the test specimens lengthways (after measurement by eddy currents method) in order to measure the thickness of each layer. The measurements shall be performed in accordance with **ISO 1463 (2004)**. For each layer, at least 10 measurements shall be done, uniformly distributed along one of the sides of the test specimens and covering the 20 mm length of the cross section.

Technical Definition

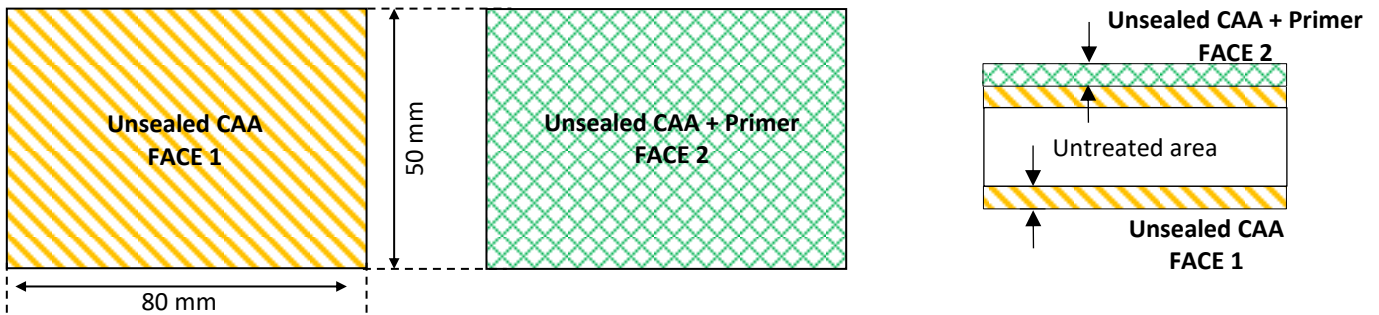
Layer Thickness measurement – Aluminium painted panels

Description of test specimens

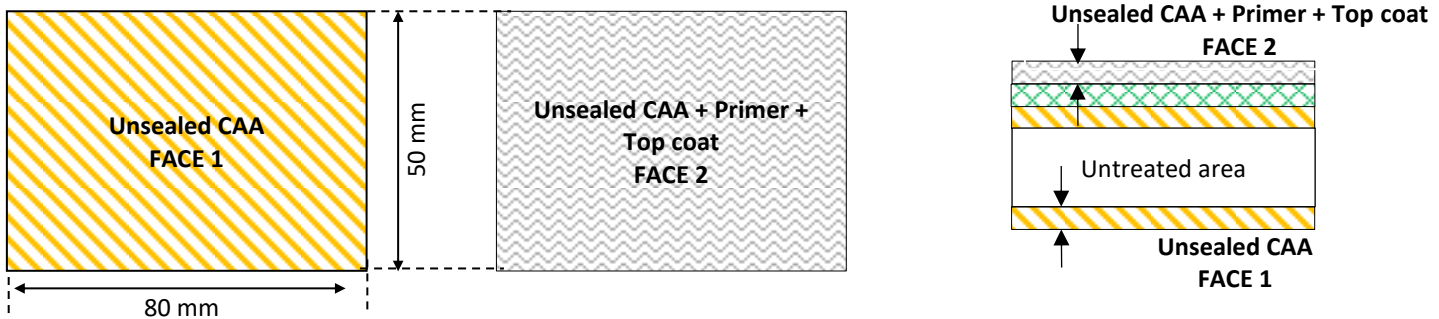
Test Specimen PI1 (Identification 10-8-**PI1**-XXX)



Test Specimen PI2 (Identification 10-8-**PI2**-XXX)




Test Specimen PI3 (Identification 10-8-**PI3**-XXX)



The tests shall be performed respecting the following conditions:

- One operator only
- One testing machine only
- Tests performed in sequence

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3. Results for both methods are to be reported as follows:

Characteristic	Unit	Significant digits	Mandatory / Not mandatory	Evaluated Yes/no
Unsealed CAA average thickness (Eddy current method) – <u>to be measured on Face 1 of PI2</u>	µm	X,X	At least one method has to be used	Yes
Unsealed CAA average thickness (Microscopic method) – <u>to be measured on PI3</u>	µm	X,X		Yes
Unsealed CAA + Primer average thickness (Eddy current method) - <u>to be measured on Face 2 of PI2</u>	µm	XX,X	At least one method has to be used	Yes
Primer average thickness (Microscopic method) – <u>to be measured on PI3</u>	µm	XX,X		Yes
Unsealed CAA + Primer + Top coat average thickness (Eddy current method) – <u>to be measured on Face 2 of PI3</u>	µm	XX,X	At least one method has to be used	Yes
Top coat average thickness (Microscopic method) – <u>to be measured on PI3</u>	µm	XX,X		Yes
For microscopic method, pictures of the sample with measurements	N/A	N/A	Mandatory	No

All evaluated characteristics will be analysed according to the algorithm A (ISO 13528 – 2015) and evaluated using z-score.

4. Testing shall start **as soon as test specimens are received**. Please contact the following e-mail address for any technical or administrative query.

Submission date :	June 15th, 2018
Technical and administrative support :	info@ptpscheme.com

5. Instructions for submission of results are detailed on the website:

<https://ptpscheme.com>

6. To ensure the confidential treatment of your results in the final report, you will be allocated a unique identity number when you register for the program.

7. Collusion and falsification of your PTP results are totally forbidden. In case of identification or suspicion of collusion or falsification, the laboratory will be excluded from the program and the sponsors will be immediately informed. The sponsors could ask you proofs of your records and analyses, so be sure to conserve data, curves and specimens.

8. The tested specimens do not need to be sent back to PTP.

REVISION HISTORY

Issue Date	Issue N°	Changes
02/01/2018	1	Document creation
26/03/2018	2	Modification of results submission deadline