



Procedure for testing and approving coating materials - P-TAC

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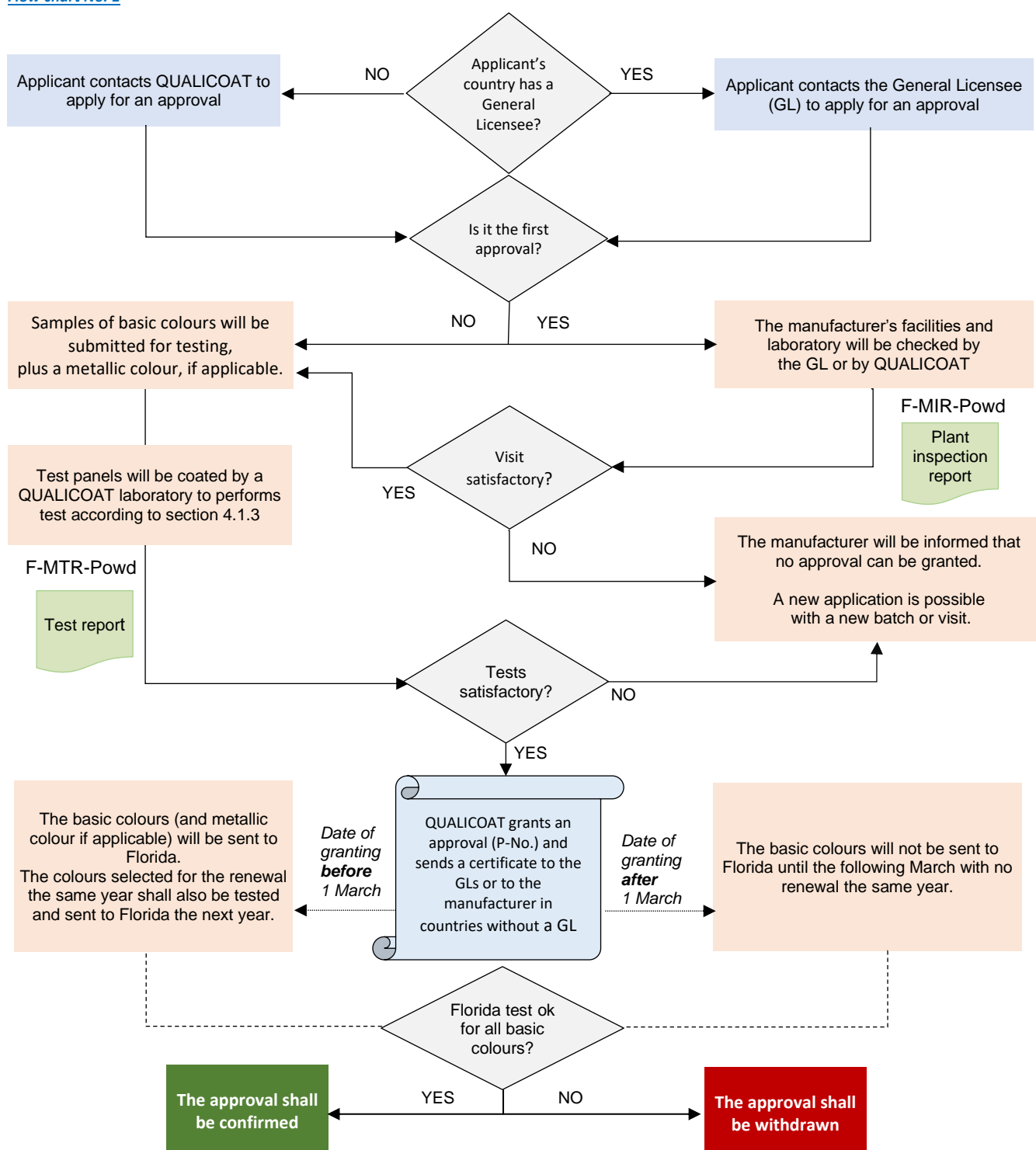
I. INTRODUCTION

This procedure defines and visualises the different steps for granting and renewal approvals with a special focus on the Florida test procedure according to the QUALICOAT (QCT) Specifications section 4. The intention of this procedure is to provide the testing laboratory guidance and for the powder manufacturer the big picture.

II. GRANTING AND RENEWALS OF APPROVALS

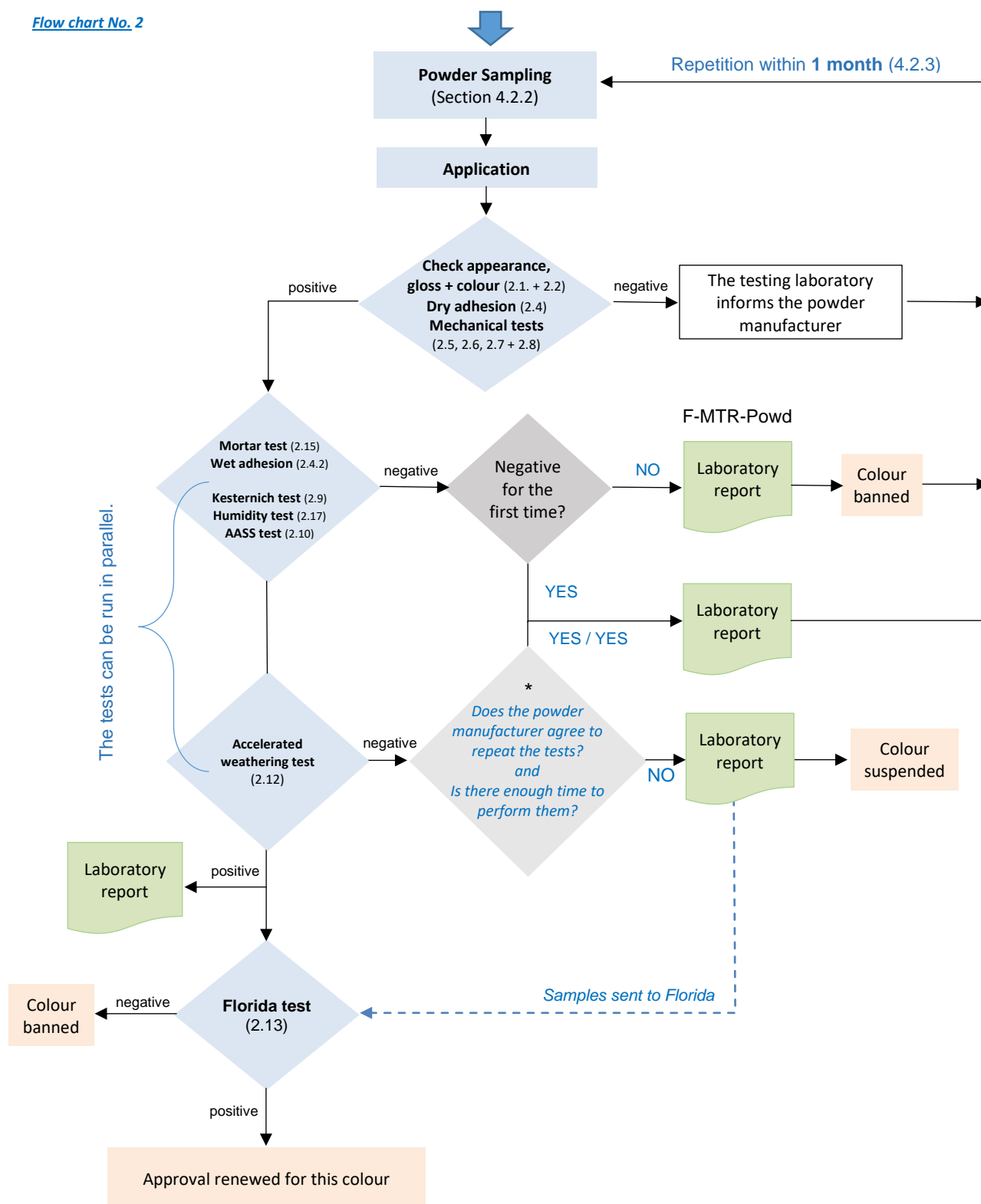
A. Granting of approvals (Section 4.1 of the QCT Specifications) – Excluding class 3

Flow chart No. 1



B. Renewal of approvals (Section 4.2 of the QCT Specifications) – Excluding class 3

Flow chart No. 2



* Procedure confirmed by the TC on 15 May 2019

III. SUMMARY OF REQUIREMENTS for the approval of organic coating materials (all classes)

See Appendix A10 of the QCT Specifications published on www.qualicoat.net/main/specifications.html

IV. NATURAL WEATHERING TEST IN FLORIDA – ISO 2810 (Section 2.13 of the QCT Specifications)¹

A. Test panels for Florida

The panels sent for the Florida test shall meet the following requirements:

Dimensions

100 x 305 mm with a tolerance of 10 mm and a thickness of 0.8 to 1.0 mm.

Number of panels

CLASSES 1	CLASSES 1.5	CLASSES 2 & 3
4	7	10

State of the panels

The panels shall be free from any kind of dirt, such as dust, grease and fingerprints, and must not have a damaged surface, for example scratches, machining marks, etc., that could affect the measurements.

Application of the coating material on the panels

The test panels shall be prepared following the QCT Specifications.

The laboratories shall make sure that the panels used for the Florida test have a consistent coating thickness.

The laboratories shall control that

- the gloss category of the coating corresponds to the category of the approval;
- the colour deviation from the original RAL colour satisfies the requirements specified in the [QCT Specifications appendix A8](#)

If these requirements are not satisfied, the laboratory will immediately inform the General Licensee and/or QUALICOAT and or the powder manufacturer that the testing programme described in Chapter 2 of the QUALICOAT Specifications cannot be started and the powder manufacturer should send a new powder batch of the colour which is not satisfactory.

When granted an approval, powder manufacturers of clear coat systems shall inform the laboratories with which base coat the clear coat should be applied.²

¹ See Appendix VI (flow chart)

² Approved by the TC on 03.11.10

B. Colours to be sent

New approval

Panels shall only be sent to Florida after the approval has been granted, i.e. with a P-No and a code allocated by QUALICOAT.

In the case of class 3 systems for which an approval is only granted after 3 years³, the panels shall be sent with a code allocated by QUALICOAT after receipt of the laboratory report.

The colours are defined for each class in section 4.1.4 of the QCT Specifications.

If a manufacturer wishes to have an approval extended for metallic colours extended for metallic colours, tests shall be carried out on RAL 9006.

Renewal

For systems approved during the first two months of a calendar year, renewal tests shall be carried out in the same year.

For all other systems, the renewal procedure starts in the calendar year after an approval has been granted.

For **classes 1 and 1.5**, the Florida WG shall select three colours every year, from which each powder manufacturer shall select two.

For **class 2**, the colours shall be selected applying the concept of families.

For **class 3**, a special selection shall be made by the Florida WG since not all colours are suitable for this class.

For all classes, one metallic colour (RAL 9006 or RAL 9007 alternately) shall also be selected for the extension to metallic colours.

A table summarising the colours to be sent to Florida is published on the QUALICOAT [website](#). This table is updated after every Florida WG's meeting.

³ Rules for class 3 systems introduced on 1.7.14

D. Assessment of the Florida test results

See *Summary of requirements for the approval of organic coating materials (all classes)*

Appendix A10 of the QCT Specifications published on www.qualicoat.net/main/specifications.html

Gloss retention for category 1

In the case of borderline gloss retention results after the Florida test, the responsible laboratory, should use an 85° geometry to measure the gloss⁴.

General rules

The results of the instrumental measurements shall be evaluated by the responsible laboratory according to the following criteria:

PANELS (individual values)	ASSESSMENT
3 panels OK	SATISFACTORY
2 panels OK and 1 panel NOT OK	SATISFACTORY
1 panel OK and 2 panels NOT OK	UNSATISFACTORY
3 panels NOT OK	UNSATISFACTORY

Visual assessment (*Section 2.13 of the QCT Specifications*)

If the instrumental result is unsatisfactory, the Florida WG members shall carry out an additional visual assessment for:

- category 1 organic coatings;
- organic coatings with a structured appearance in all gloss categories;
- organic coatings with a metallic or metallised effect
- organic coatings in light colours ($L > 70$)⁵

In case of doubt, the WG is allowed to carry out an additional visual assessment on coated panels in all classes and categories even if they do not belong to the above list of candidates for visual assessment.

This visual assessment shall be carried out completely anonymously. For this purpose, the panels shall be identified with special codes and every WG member shall assess the panels individually.

Every WG member shall record his or her assessment in a file and keep this evaluation until the end of the meeting. At the end of the meeting, the results of the assessment shall be compiled. The final assessment shall reflect the opinion of the majority of the WG members.

⁴ Resolution No. 5/TC 22.11.18

⁵ Resolution No. 4/TC 5.11.14.



E. APPENDICES

APPENDIX A - List of colour tolerances before granting or renewing an approval (for QUALICOAT laboratories)

See Appendix A8 of the QCT Specifications published on www.qualicoat.net/main/specifications.html

APPENDIX B - List of colour tolerances after weathering tests for granting or renewing an approval (for QUALICOAT laboratories)

See Appendix A12 of the QCT Specifications published on www.qualicoat.net/main/specifications.html