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The global standard for architectural aluminium finish



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Ivo Vermeeren PRESIDENT

MISSION

To provide the global construction industry with the best possible specification and methodology for performance coatings on architectural aluminium.

By constant development in finish formulations, equipment selection and application to enable QUALICOAT to lead the development of quality architectural finishes worldwide.

To grant approvals to manufacturers of powder and liquid formulations and pre-treatment systems that meet the requirements of QUALICOAT members.

To review and licence coating plants which exceed the QUALICOAT Specification and to monitor the same to ensure consistent quality in supply.

To ensure the development and communication of the QUALICOAT standard is driven by the membership which continues to exceed both country standards and regulations.



To provide, to grant to review & to ensure the QUALICOAT global standard

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As we navigate through the complexities of 2023, QUALICOAT continues to adapt, innovate, and uphold the highest standards in the architectural aluminium finish industry. This year has been marked by significant progress across various fronts, from technological advancements to strategic rebranding and coping with geopolitical challenges.

2023 began with a series of workshops, all important and focused on improving our specifications, ensuring quality is paramount and moving our industry forward one resolution at a time. Pascale Bellot and the QUALICOAT Secretariat—Adriana Aeschbacher, Tiffany Maechler, Nasir Fahmeed, Louise Egreteau, and Monica Gerber —with their wealth of knowledge, experience, and phenomenal work ethic, worked diligently to ensure that all QUALICOAT administrative tasks were handled despite the pressures of our industry. They remain our backbone, contributing immensely to our ongoing mission.

Technological Advancements

The development of our new IT system received its final approval and began in the third quarter of 2023. This new application promises to significantly streamline our processes, making our operations more efficient than ever. Demonstrations of its capabilities have been promising, Signalling a bright future for our organization's workflow.

Rebranding for the Future

Our work within the Marketing WG marked a new chapter in our journey as we prepared to collaborate with the chosen marketing agency. This rebranding initiative, endorsed by the Executive Committee, aims to strengthen QUALICOAT's position and visibility in the market. The preliminary phases are set to be in full force in 2024 and promise to enhance our brand awareness globally.

Navigating Geopolitical Challenges

The situation in Ukraine has posed significant challenges, necessitating a temporary suspension of communication with our Russian Members, RAEA as of December 2023. This decision, though difficult, was made with the hope of future reconciliation. We stand ready to welcome back our colleagues when circumstances allow.

QUALICOAT 3.0

The QUALICOAT 3.0 initiative continues to gain momentum, focusing on the inclusion of recycled aluminium and its role in reducing our carbon footprint. The deeper we delve into the project, the more significant and profound the initiative feels. We look forward to the impact this will have on our industry.

Leadership and Team Dynamics

To further strengthen the Secretariat, Jacinta Thurairajah joined the QUALICOAT Organisation in June 2023, in the form of a Certification Body Administrator, focusing on the Coaters and Pretreatment segments. She was joyfully welcomed to the team, and her expertise in technical translations and her academic and entrepreneurial achievements serve her well in her new role. In July 2023, Coby Armar also joined the QUALICOAT Organisation, bringing a wealth of experience from engineering to the property industry. He took on the role of Deputy Secretary General to succeed Pascale Bellot in 2024 as Secretary General. The growing team reflects our organisation's dynamic adaptability.

Looking Ahead

Despite the challenges of 2023, QUALICOAT's future is bright. Our ongoing projects, such as the development of Postforming and the classification of different corrosion classes, along with our strategic marketing and specification revisions to be led by Pascale Bellot, position us well for continued success. We remain committed to our mission of providing the global construction industry with the best possible specifications and methodologies for architectural aluminium finishes.

As we move forward, we are grateful for the dedication and support of our members, partners, and stakeholders. Together, we continue to strive for excellence and innovation in all we do.

Thank you to everyone who has been part of our journey this year. Here's to a prosperous and successful 2024 for QUALICOAT and all our members worldwide.

Together,

we continue to strive for excellence & innovation in all we do.

QUALICOAT SECRETARIAT





Meetings of the QUALICOAT Committees and Working Groups

In 2023, the **Executive Committee** met online on 16 March 2023 and physically together with the **Technical Committee** met on 16-17 May in Brussels and on 15-16 November in Tunis.

Two **Meetings of Association Members** were held on 17 May 2023 in Brussels and on 15 November 2023 in Tunis.

All the meetings of the various **Working Groups (WGs)**, the **QUALIDECO Committee** and **QUALISURFAL** are shown in the table below:

PLACE	DATE
Conference call	09.02.2023
Conference call	16.03.2023 09.05.2023
Zurich (CH	15.09.2023
Conference call	02.10.2023
Conference call	06.11.2023
Conference call	11.12.2023
Conference calls	02.03.2023
	19.06.2023
	Conference call Rome (IT) Conference call Zurich (CH Conference call Conference call Conference call

Aluminium Sub WG Cast aluminium

Aluminium Sub WG Genoa Exposure

Florida WG

Laboratories WG

Powders WG

Powders Sub WG Unannounced sampling

Powders Sub WG Class 3

Pre-Anodizing WG

Pretreatment WG

Marketing WG

QUALIDECO Committee

QUALIDECO Florida WG

QUALIDECO Suppliers WG

QUALISURFAL Coating Section

QUALISURFAL Decoration Section

Specifications WG

Ad-hoc WG 'Coating lines'

Ad-hoc WG 'Post-forming'

Ad-hoc WG 'QCT 3.0'

Ad-hoc WG 'Accelerated Weathering Test'

The proceedings of the WG meetings were recorded in minutes, which were sent to the General Licensees.

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Conference call

Conference calls

Alcalá (ES) Conference call

Zurich (CH) Conference calls

Lyon (FR) Conference call

Conference calls

Conference calls

Barcelona (ES)

Barcelona (ES) Conference call

Conference call **Zurich (CH)** Conference call Conference call

Rome (IT) Conference call

Cameri (IT)

Lyon (FR)

Ibiza (ES)

Ibiza (ES)

Conference calls

Conference call

Conference call

Conference calls

Conference call

04.10.2023

09.10.2023

12-13.07.2023 25.07.2023

> 23.03.2023 12.09.2023 10.11.2023

22-23.02.2023 26.07.2023

08.11.2023

31.01.2023 17.08.2023

24.01.2023

25.01.2023 29.08.2023

20.01.2023 **09.03.2023** 24.04.2023 13.06.2023

15.03.2023 26.09.2023

05-06.09.2023

23.02.2023

18-19.09.2023

19.09.2023

Several meetings throughout the year

17.01.2023

06.02.2023

07.03.2023 18.10.2023

08.12.2023

The following update sheet were ratified on 16 May 2023 to become effective on **1**st **July 2023**:

QCT-SPEC 2023-US02MethoQCT-SPEC 2023-US03CrossQCT-SPEC 2023-US06pH- NQCT-SPEC 2023-US08Variou

Methods for measuring conversion costing weight
Cross-cut (wording and evaluation)
pH- Meter
Various adjustments

These update sheets were included in the Master version of the QUALICOAT Specifications 2023 (V02) published on 1st July 2023.

The following update sheets were ratified on 16 May 2023 to become effective on 1st January 2024:

QCT-SPEC 2023-US01	Introduction of off-site anodic pretreatment
QCT-SPEC 2023-US04	Introduction of Postforming
QCT-SPEC 2023-US07	Combination of wet adhesion and resistance to boiling water Test

These update sheets were included in the Master version of the QUALICOAT Specifications 2024 (VO1) published on 1st January 2024.

The following update sheets were ratified on 15 November 2023 to become effective on 1st January 2024

QCT-SPEC 2023-US09 QCT-SPEC 2023-US10	Conductivity of final rinse and dripping water AASS: Maximum length of infiltration
QCT-SPEC 2023-US11	Appendix A6 - Various adjustments
QCT-SPEC 2023-US12	Procedure for approval of new pretreatments
QCT-SPEC 2023-US13	Evaluation method of Martindale test
QCT-SPEC 2023-US14	Class 3 Metallic extension, suspended colours and critical colours
QCT-SPEC 2023-US15	Various adjustments

These update sheets were included in the Master version of the QUALICOAT Specifications 2024 (VO1) published on 1st January 2024.

The following update sheets submitted by the **QUALIDECO Committee** were ratified by the Executive Committee on **on 17th May 2023**:

QDC-SPEC 2023 – US01 Timeline for Submission of Decorators' Inspection Reports

The following update sheets submitted by the **QUALIDECO Committee** were ratified by the Executive Committee on **16th November 2023**:

QDC-SPEC 2023–US02	Harmonization of Chapter 6 with Chapter 4
QDC-SPEC 2023–US03	Deadline for the submission of powder samples for the renewal
	of DP-Approvals
QDC-SPEC 2023–US04	Right of Appeal
QDC-SPEC 2023–US05	Colour Change and Visual Assessment for Decorative Finishes

All these update sheets were included in the Master version 2024 of the Specifications for Decoration of coated Aluminium used for architectural Applications (QUALIDECO) - Appendix to the QUALICOAT Specifications 2024 published on 1st January 2024.

The global standard for architectural aluminium finish

An overview of quality matters and investigations that were discussed and prepared in the various Working Groups during 2023.

Aluminium + Label Extension WG

With the first edition of Technical Information Sheet No.4 (TIS), QUALICOAT published recommendations for different types of corrosion protection. These concentrate on the combination of environmental conditions and the QUALICOAT Specifications to achieve a long-term performance of the coated aluminium, also taking the work of architects and specifiers into account. The focus of this new TIS is a "Corrosion Table" demonstrating possible combinations of material quality, different types of pretreatments and environmental descriptions according to international standards.

The revision of the requirements for the coating of cast material is an ongoing project. Aluminium cast parts appear as accessories for architectural applications. This revised document will refer to relevant material parameters as well as to the pretreatment, the coating and testing of these parts.

Ralf Heitzelmann, Convenor, Aluminium + Label Extension WG

Laboratories

The ever increasing requirements and implementation of new testing procedures for coating systems require an exchange among all testing laboratories, in particular interlaboratory comparison tests. The Laboratories WG's objective is the harmonisation of testing procedures worldwide. These efforts enhance the reliability and comparability of test results by standardizing the test methods. Subsequently the coating industry can ensure that used products meet the quality requirements set by QUALICOAT.

Additionally, this approach facilitates the exchange of information and best practices among laboratories and manufacturers. This further improves the overall product quality and efficiency of the testing process. Through these collaborative efforts, the coating industry can achieve a higher level of product performance and consistency, benefiting consumers and manufacturers equally.

Christof Langer, Convenor, Laboratories WG

Off-site Anodisers

The Pre-anodising Working Group continued to develop and update the specifications concerning pre-anodising during 2023.

We are pleased to report the successful implementation of 'Appendix A15 - Specifications for off-site anodisers' in this year and also the modification of the requirements of the in-house pre-anodising process.

The Master Inspection Report (MIR) for the coaters and anodisers were approved by the TC and EC and will be introduced.

Also, a statistical survey of the AASS and FFC results of 2018 to 2020 were reviewed to evaluate the anodic treatment performance in comparison to chemical treatment. This will be used in future discussions to further designate the anodic treatment.

Mo Panam, Convenor, Pre-anodising WG

Pretreatment

With the approval and implementation of Appendix A6b "Preliminary sampling and testing (PST) of pretreatment-systems with modified processes or new technologies", QUALICOAT is proactive in exploring potential innovations proposed by the chemical suppliers that promote sustainability and reduce energy and water consumption.

Using the statistics and the annual renewal of approval certificates, QUALICOAT continues to monitor the performance of all chromium 6+-free conversion products approved and used in the market. Subsequently, the margins of failure in corrosion tests carried out in the quality inspections have been narrowed with the help of a procedure known as "10+2" rule and "15+3" rule.

The conductivity of the rinse water before and after the conversion stage of the pre-treatment lines has been updated in the Specifications, merging the requirements of quality, safety and minimisation of water consumption.

Powder coatings

The Powders Working Group leads QUALICOAT's mission to uphold and enhance powder coating standards. In 2023, the efficiency of this group was demonstrated through two key criteria:

- 1 A pivotal achievement was optimizing supplier engagement, with various manufacturers actively participating in WG meetings, thus securing and elevating label quality standards.
- The establishment of Sub Working Groups, including Postforming, Class 3, and Unannounced Sampling, proved 2 particularly impactful. The outcomes from some of the Sub-WG proposals were translated into concrete update sheets. This concept facilitated data consolidation, initial analysis, and proposal preparation for the Powders Working Group, subsequently presented for validation by the TC/EC.

In parallel, the inspection protocols for Powder Manufacturers' plants were enhanced, aligning with international standards. The culmination of this effort in 2023 resulted in comprehensive audit frameworks and lists of "Non-Conformities, Deviations, Remarks," underscoring the WG's commitment to guality assurance.

Additionally, the issue of powder coating quality consistency was addressed through the Unannounced Sampling project. A comprehensive 2023 study reaffirmed satisfactory quality across continents, demonstrating high gloss retention and compliance with laboratory standards, ensuring uniform quality globally.

Postforming

The inclusion of Postforming in the QUALICOAT Specifications aims to apply specific rules, tests and requirements for the production and control of coated material subject to bending or forming (stamping).

After a profound revision of the initial draft, Appendix 14 "Specifications for Powder coated Material suitable for Postforming" was approved during the TC and EC in November 2023 and introduced in the QUALICOAT Specifications 2024.

This appendix establishes the minimum requirements that plant installations, organic coating materials, processes, and finished products shall meet for Postforming applications. Detailed information is dedicated to the bending test and the importance of an agreement between coaters and their customers on such requirements.

QUALICOAT 3.0

2023 was a milestone year for the work completed towards the QUALICOAT 3.0 Specification, which was born out of a need to address the problems of corrosion and longevity of coating finishes and to support the use of recycled aluminium.

Two conference calls were held during the year for the QUALICOAT 3.0 WG. During these meetings the Technical Information Sheet No. 3 "Recommendations for Aluminium Alloys" was modified for further clarity about QUALICOAT 3.0 applications.

The marketing of QUALICOAT 3.0 and its publication was included in QUALICOAT's business goals and approved by the EC. The Marketing WG proposed a "Way forward: QUALICOAT label for Extruders and QUALICOAT 3.0 Certification for Projects using Recycled Aluminium". The idea was endorsed by the TC and EC in November 2023 for further discussions in 2024 by the WG.

The AASS and FFC tests were requested to be conducted on the samples collected during the inspections for granting QUALICOAT 3.0 approvals. The corrosion results were satisfactory as expected and met QUALICOAT requirements for AASS and FFC tests.

In 2024 we are looking to cooperate more with extruders to enrich the QUALICOAT 3.0 Specification.

QUALISURFAL

Coating Section

More than 1,000 inspections have to be carried out worldwide every year. Since one specialist alone cannot carry out this task, several experts are required. In order to ensure consistent quality of inspections worldwide, there is an annual exchange of experiences in which a wide variety of topics are discussed, trained and developed.

At the last meeting in Ibiza, topics such as the integration of aluminium quality into the quality regulations and the sustainable use of the Curing Index were presented and discussed intensively. The inspectors provide valuable feedback and are therefore also heard on many technical topics in various working groups within QUALICOAT.

Decoration Section

An overview of the Specifications 2023 was presented to the inspectors to ensure alignment with plant inspection requirements for Decorators using sublimation or powder-on-powder technology. Active and concrete deliberation from all delegates was held regarding the main aspects of the Master Inspection Form and its correlation with different parts of the Specifications. Furthermore, the "Procedure for evaluating inspection results" containing the list of nonconformities for sublimation and powder-on-powder technology was explained and discussed during the meeting.

The meeting fostered an open environment, with delegates presenting interesting proposals for the future. This showcased the expertise of the inspectors, emphasizing their importance in maintaining high quality inspections and therefore the credibility of the QUALIDECO label.

Anne Banuls, Convenor, Powders WG

Irene Marcolungo, Convenor, Ad-hoc WG Postforming WG

Mo Panam, Convenor, Ad-hoc QCT 3.0 WG

Marc Holz, Convenor, QUALISURFAL (Coating Section)

Salvatore Valzano, Convenor, QUALISURFAL (Decoration Section)

SYSTEMS NUMBER OF LICENSEES AND APPROVED SYSTFN APPROVED

OVERALL

	31.12.2021	31.12.2022	31.12.2023	DIFFERENCE
Coater licensees	495	531	545	+14
Approved powders	725	746	736	-10
Approved pretreatment systems	95	96	93	-3
QUALIDECO Licensees (decorators and suppliers)	96	105	102	-3

BREAKDOWN BY GEOGRAPHIC REGION (COATING LICENCES)

YEAR	EUROPE	AFRICA	ASIA	AUSTRALIA	AMERICA
2023	352	41	130	1	21
2022	353	38	125	1	14
2021	330	33	118	0	11
2020	373	28	73	9	14

BREAKDOWN BY GL

GL	COATER	COATER POWDER APPROVED		PRETREATMENT	QUALIDECO		
		MANUFACTURER	POWDERS		D	PS	FS
AAG NPC	26	2	10	4	9	1	-
AEA	44	6	32	8	15	3	-
AFMSZ	8	1	1	-	-	-	-
AMELAQ	9	6	9	-	-	-	-
APAL	17	3	11	-	2	-	-
AYID	52	16	87	3	-	2	-
QMEA	58	22	83	2	4	1	-
QUAL.ION	15	-	-	5	-	-	-
QUALICOAT France	29	3	32	1	2	-	-
QUALICOAT JAPAN	1	-	-	-	-	-	-
QUALICOAT Management	82	37	130	3	11	-	-
QUALICOAT SCHWEIZ	13	2	39	3	-	1	-
QUALICOAT UK & Ireland	27	5	30	4	1	-	-
QUALIPOL	31	7	25	-	3	-	-
QUALISINO LTD	22	34	75	19	-	5	3
QUALITAL	57	17	150	9	20	10	6
QUALUBEL	21	-	-	-	1	-	-
VOA	33	5	22	32	2	-	-
TOTAL	545	166	736	93	70	23	9

\bigcirc AUDIT NSPECTIONS

Coating Plant inspections

In 2023 the QUALICOAT Certification Body evaluated and confirmed 1598 inspection reports.

For relevancy and accuracy, an improved version of the Master Inspection Report (V06) will be enforced from 1st January 2024 for all granting and renewal inspections.

Powder Plant inspections

The QUALICOAT Certification Body evaluated and confirmed 28 inspection reports for 2023. These inspections were conducted by the different approved QUALICOAT inspectors.

To harmonize the reporting process, an updated version of Master Inspection Report (V04) was implemented from 1st July 2023.

Witness Audits for QUALICOAT and QUALIDECO inspectors

11 witness audits were performed during the year by the Certification Body for QUALICOAT in Australia, Belgium, Croatia, France, Germany, Hungary, Italy, Spain and the United Arab Emirates.

3 witness audits were performed during the year by the Certification Body for QUALIDECO in France, Spain and the United Arab Emirates.



Meeting of QUALICOAT ar Inspectors, 18-19 Septem (Ibiza, Spain)

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AEA - Spain



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QUALICOAT Schweiz



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QUALISINO - China



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QUALICOAT UK & Ireland



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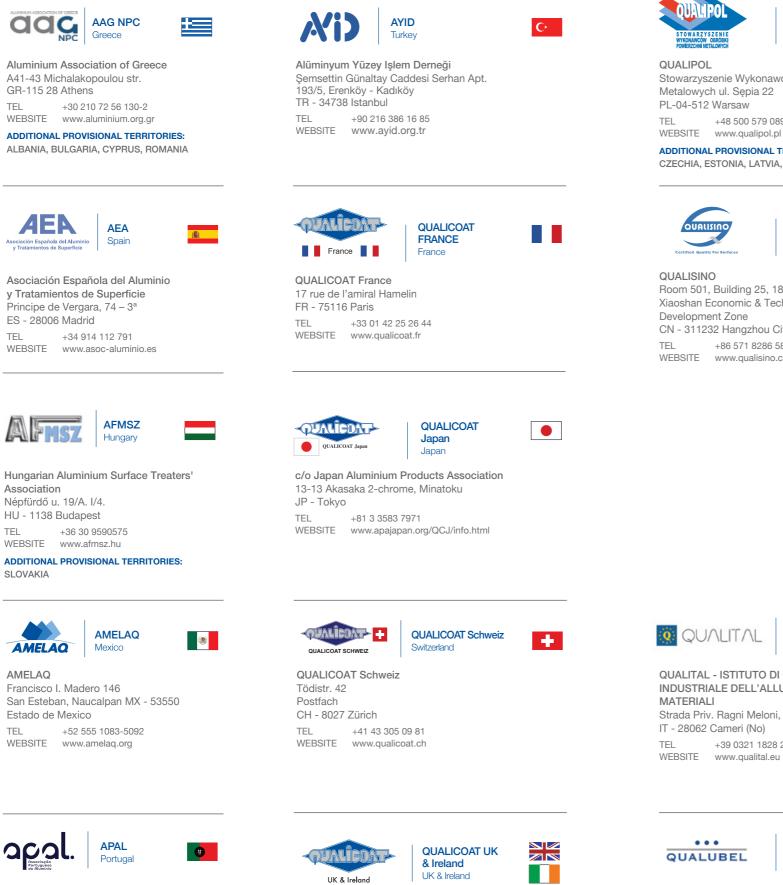
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