



Exploration & Production

GENERAL SPECIFICATION

CORROSION

GS COR 350

External protection of off-shore and coastal structures and equipment by painting

04	10/04	General review
03	10/03	General review – Change of Group name and logo
02	10/02	Binders coding, stainless and immersed paint systems
01	10/01	General review
00	02/01	First issue
Rev.	Date	Notes

Contents

1. Scope	4
2. Reference documents	4
3. Painting systems	6
3.1 Reference code for painting systems for offshore and coastal areas	6
3.2 Approved systems	7
3.3 Substitution rule	7
3.4 Colour coding	7
4. Items not to be painted	7
4.1 Items not to be painted	7
4.2 Case of stainless steels	8
5. Technical content of tenders	8
6. Certification of personnel	9
6.1 Operators	9
6.2 Inspectors	9
7. Surface preparation	9
7.1 Design and preparation before blasting of surfaces to be painted	9
7.2 Quality of abrasives	9
7.3 Blast cleaning of carbon steel (AF)	9
7.4 Blast cleaning of carbon steel (AF) on automatic production lines	10
7.5 Blast cleaning of stainless steels (AI)	10
7.6 Surface preparation of galvanised steel (AG)	10
7.7 Preparation of galvanised or cadmium plated bichromated surfaces (AB)	10
8. Paint application	11
8.1 Procurement and storage	11
8.2 Samples for QA/QC purposes	11
8.3 Qualification of application procedure for each system	11
8.4 Kick off meeting	11
8.5 Application	12
8.6 Repairs	13



9. Checks, inspection and acceptance.....	13
9.1 Checks.....	13
9.2 Inspection test plan.....	14
9.3 COMPANY inspection	14
9.4 Provisional acceptance.....	14
9.5 Guarantee.....	14
9.6 Final acceptance.....	15
10. Technical file	15
Appendix 1 List of approved SUPPLIERS	16
Appendix 2 List of systems	17
Appendix 3 SUPPLIERS' systems.....	20
Appendix 4 Colour coding.....	143

1. Scope

This General Specification defines the technical requirements for the execution of painting works of new built offshore or coastal structures and equipment. The specification is based on the use of high durability painting systems for facilities whose design life is anticipated to be more than 15 years.

This specification does not cover painting systems for temporary equipment or equipment with design life less than 10 years, and for which alternative painting systems shall be submitted to COMPANY for approval.

2. Reference documents

Standards

Reference	Title
ISO 12944-1	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 1: General introduction
ISO 12944-2	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 2: Classifications of environments
ISO 12944-3	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 3: Design and constructive requirements
ISO 12944-4	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 4: Surface types and preparation
ISO 12944-7	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 7: Execution and supervision of painting work
ISO 12944-8	Paints and varnishes-Corrosion protection of steel structures by paint systems. Part 8: Development of specifications for new and maintenance work
ISO 20340	Paints and varnishes-Performance requirements for protective paint systems for offshore and related structures.
ISO 11124-2 to 4	Preparation of steel substrates before application of paints and related products. Specifications for metallic blast-cleaning abrasives
ISO 11125-1 to 7	Preparation of steel substrates before application of paints and related products. Methods for testing metallic blast-cleaning abrasives
ISO 11126-7, 8, & 10	Preparation of steel substrates before application of paints and related products. Specifications for non-metallic blast-cleaning abrasives: fused aluminium oxide, olivine sand, and garnet
ISO 11127-1 to 7	Preparation of steel substrates before application of paints and related products. Methods for testing non-metallic blast-cleaning abrasives
ISO 8501-1 to 3	Preparation of steel substrates before application of paints and related products. Visual assessment of surface cleanliness.

Reference	Title
ISO 8502-1 to 4	Preparation of steel substrates before application of paints and related products. Tests for the assessment of surface cleanliness
ISO 8502-6	Preparation of steel substrates before application of paints and related products. Tests for the assessment of surface cleanliness: extraction of soluble contaminants for analysis-The Bresle method
ISO 8502-9	Preparation of steel substrates before application of paints and related products. Tests for the assessment of surface cleanliness: Field method for conductometric determination of water-soluble salts.
ISO 8503-1 to 4	Preparation of steel substrates before application of paints and related products. Surface profile of abrasive blast-cleaned steel
ISO 8504-1 to 3	Preparation of steel substrates before application of paints and related products. Methods for surface preparation
ISO 1513	Paints and varnishes. Examination and preparation of samples for testing
ISO 19840	Paints and varnishes. Determination of dry film thickness. Non-destructive magnetic flux method
ISO 2409	Paints and varnishes. Cross-cut test
ISO 4624	Paints and varnishes. Pull-off test
ISO 4628-1 to 6	Evaluation of paint and varnish defects. Designation of intensity, quantity and size of common types of defect
ISO 9223	Corrosion of metals and alloys. Atmospheres' corrosivity. Classification
ASTM D 4752	Standard test method for measuring MEK resistance of ethyl silicate (inorganic) Zinc-rich primer by solvent rub
ASTM D 4940	Standard test method for conductimetric analysis of water soluble ionic contamination of Blasting abrasives

Professional Documents

Reference	Title
RAL 840 HR ACQPA	Colors standard "Association pour la Certification et la Qualification en Peinture Anticorrosion". Painting systems certified by ACQPA. www.acqpa.com

Regulations

Reference	Title
Not applicable	

Codes

Reference	Title
Not applicable	

Total General Specifications

Reference	Title
GS COR 352	Internal protection of equipment by painting

3. Painting systems

Painting systems are defined according to the following parameters:

- Type of substrate
- Atmosphere or environment
- Minimum and maximum Operating temperatures.

3.1 Reference code for painting systems for offshore and coastal areas

3.1.1 Coding system

Part 1: atmosphere or environment

Atmosphere or environment	Category of corrosivity
Marine atmosphere -MA	C5-M
Buried - EN	EN
Immersed – IM	IM - 2

Part 2: Substrate

AF	Ferritic (carbon) steel or cast iron
AI	Austenitic stainless steels and special alloys
AG	Galvanized steels
AB	Cadmium-plated bichromated steels
PL	Plastics
BE	Concretes and similar products

Part 3: Operating temperatures

SNNN/SNNN: two-zone code containing the symbol + or - and three digits (NNN) indicating the minimum and maximum Operating temperatures respectively.

3.1.2 Identification of painting systems

Systems are identified as follows:

MA	AF	+121/+300	XX
Part 1	Part 2	Part 3	System number

3.2 Approved systems

The painting systems approved by COMPANY are given in appendix 3. It is emphasised that these painting systems, where relevant, have been subject to certification by ACQPA, according to COMPANY policy and have therefore been subject to extensive corrosion testing.

For painting systems which can not be certified through the ACQPA procedures (especially high temperature painting systems), the approved painting systems are the result of COMPANY experience and operational feedback.

3.3 Substitution rule

When selecting a painting system, a system designed to withstand environments with higher corrosivity shall always be applicable to lower corrosivity environments.

3.4 Colour coding

Colour coding shall be according to the schedule defined for the project. Generally, colours will be chosen to match those of installations already present in the same block or country.

If the project has no specific requirements, then the colour coding shall be according to Appendix 4.

In any case, the painting works carried out by CONTRACTOR shall include all colour coding and marking required for service identification.

4. Items not to be painted

4.1 Items not to be painted

Unless otherwise specified, the following surfaces shall not be painted:

- Galvanised steel gratings
- Concrete structures
- Plastic and plastic coated materials, provided their resistance to UV has been demonstrated, and colour coding is not necessary.
- Non ferrous materials such as 90-10 and 70-30 copper nickel alloys, monel, aluminium bronze, and nickel alloys when not thermally insulated.
- Machined surfaces

4.2 Case of stainless steels

All stainless steels shall be painted under hot or cold thermal insulation.

However, 316 stainless steel casing of the thermal insulation shall not be painted.

AISI 304, 304L, 321 shall be systematically painted with system P05, even when not under thermal insulation.

AISI 316, 316L shall be painted with system P05 2nd even when not under thermal insulation, if the service temperature is more than 50 °C.

All stainless steels shall be coated at non welded carbon steel pipe supports.

In addition, for facilities located in the Middle East and South East Asia, 316 and 316L stainless steels shall be painted, even when not under thermal insulation, and regardless of the operating temperature.

No zinc containing paints shall be used on stainless steels.

For instrumentation tubing for which painting is not possible due to small diameters, alloy 904L shall be used. This requirement does not include fittings, which can be made with 316 stainless steel.

5. Technical content of tenders

Tenders shall include the following information:

- Proposed paint systems for each category / location of item to be painted,
- Product data sheets,
- Terms and conditions of guarantee,
- A statement showing that all parties involved (CONTRACTOR, SUPPLIER, and APPLICATOR) will be carrying out the work according to the present specification, or if relevant, to the project particular specification. This statement shall also show that the guarantee is jointly underwritten by all parties and specify the durations and performance levels of the guarantee. This statement can consist in either a certificate of homologation by OHGPI (Organisme d'Homologation des Garanties en Peinture Industrielles) or a letter signed by the head office of each party involved.
- Maximum thickness tolerable for each coat and for the full system,
- Surface preparation and painting procedures,
- Inspection test plan with acceptance criteria and frequency of inspection,
- A list of inspection and painting equipment to be used,
- Colours to be used for each item of equipment and for the different coats, in accordance with the colour chart chosen for the project by COMPANY,
- Methods of protection of items to be painted against adverse weather conditions,
- Certificates (ACQPA, FROSIO, NACE, or equivalent) of operators and inspectors.

6. Certification of personnel

6.1 Operators

Operators shall be individually certified by an approved organization (ACQPA, FROSIO, etc.).

6.2 Inspectors

Inspectors shall be individually certified by an approved organization (ACQPA, FROSIO, NACE International minimum level 3, etc.).

7. Surface preparation

7.1 Design and preparation before blasting of surfaces to be painted

All structures and equipment shall be designed according to [ISO 12944](#) international standard for high durability paint systems.

All sharp edges shall be rounded (minimum radius > 2 mm).

The design of the item to be painted shall be such that it creates no interstice and inaccessible area.

All oil or grease shall be removed by washing the item to be painted with appropriate solvents or any other suitable means before beginning blast-cleaning operations. This includes bolt holes in piping assemblies.

Weld spatter and remains of temporary welds, deposits or surface defects shall be eliminated by appropriate means; removal by deep grinding is subject to COMPANY approval.

All mating surfaces of equipment subject to outdoor exposure shall be coated with the full coating system prior to assembly (saddles, skirts, base plates, olded components, flanges, etc.).

CONTRACTOR shall protect all equipment that is not to be painted or may be affected by the presence of abrasives or paint. Special attention shall be paid to avoid splashes of zinc paint on equipment made of austenitic steels.

7.2 Quality of abrasives

Abrasives shall be sealed in watertight packaging. Any product delivered in defective packaging shall be rejected. Products must be stored sheltered from the elements.

Conductivity of abrasives shall be less than $150 \cdot 10^{-6}$ SIEMENS/cm as per [ASTM D4940](#).

The use of copper slag is prohibited.

7.3 Blast cleaning of carbon steel (AF)

All surfaces to be coated shall be blast-cleaned according to:

- the grade of cleanliness ([ISO 8501](#) standard),
- the surface profile Ra ([ISO 8503](#) standard: roughness meter with adapted cut-off or visio tactile surface profile comparator)

specified for each system in Appendix 3

After blast-cleaning, all dust must be removed using a vacuum cleaner before application of the paint (ISO 8502 – 3).

All blast-cleaned surfaces shall be coated before the deterioration of the "grade of cleanliness". In any case, any surface that has been blast-cleaned shall be coated on the same day.

Before painting works commence, checks for the contamination of the surface by salts shall be checked (ISO 8502 – 6 & 9).

The blast cleaning procedure shall be submitted to COMPANY for approval.

7.4 Blast cleaning of carbon steel (AF) on automatic production lines

In addition to the requirements of § 7.3:

- All surfaces shall be blast-cleaned to grade of cleanliness Sa 3 (ISO 8501 -1).
- CONTRACTOR shall ensure that the grit selected can achieve the required surface profile. This requirement includes determination of grit mix, as well as quantity and frequency of renewal. Surface profile shall be checked twice per shift and shall record the results.
- Dust level shall be thoroughly checked (ISO 8502 – 3)

The blast cleaning procedure shall be submitted to COMPANY for approval.

7.5 Blast cleaning of stainless steels (AI)

Stainless steels shall be segregated, carbon steel supports for storage shall be systematically painted, and lifting equipment shall prevent iron contamination.

Stainless steel surfaces to be coated shall be etched or degreased and blast-cleaned with a non-ferrous and chlorine-free abrasive.

The blast cleaning procedure to be submitted to COMPANY shall include:

- Abrasive composition to obtain a surface roughness of $R_a = 10$ microns (8 microns acceptable locally).
- Dust level (level 2 maximum of ISO 8502 – 3)
- Substrate contamination checks. ferrous contamination / direct colorimetry method using Prussian blue (potassium ferricyanide) – no surface pollution can be accepted.

7.6 Surface preparation of galvanised steel (AG)

Galvanized steel to be coated shall be cleaned, degreased and etched using the product specified in the systems.

7.7 Preparation of galvanised or cadmium plated bichromated surfaces (AB)

Galvanized or cadmium-plated bichromated surfaces shall be cleaned and degreased.

8. Paint application

8.1 Procurement and storage

The quantities of paint and thinners required to perform the entire job shall be procured before the work commences, except in cases where the shelf life of the product is less than the anticipated duration of the work.

Thinners, solvents, etc. shall be stored in a suitably ventilated fireproofed building, separate from other painting consumables.

The products shall be delivered in their original sealed packaging and stored in such conditions as to avoid their degradation (controlled temperature, etc.). The packaging shall be clearly marked with the product description, the batch number, the fabrication date and the expiry date.

The expiry dates from the fabrication dates are:

- For zinc ethyl silicate: 6 months
- For other products: 1 year
- Specific cases: according to manufacturer's recommendation with COMPANY approval.

8.2 Samples for QA/QC purposes

From each batch of products used during the work, the CONTRACTOR shall take two samples to be made available to COMPANY.

8.3 Qualification of application procedure for each system

One month before work commences, all the selected systems shall be applied on test plates representative of the structure to be painted. The products used shall be sampled from the same batches than these intended for the works.

The system shall be applied in the presence of the MANUFACTURER of the paint and the OWNER's representative, in climatic conditions that are as similar as possible to worst case conditions that can be foreseen during the work on the construction site. Application shall be performed by the painting specialist who will be responsible for application during the work.

When the painting systems are fully cured, visual inspection and adhesion testing shall be carried out to confirm that the performance of the painting systems meet those specified for each system in Appendix 3.

8.4 Kick off meeting

A technical kick off meeting shall be organized by the CONTRACTOR in the presence of COMPANY and MANUFACTURER to define all the details regarding the work, application procedures, and inspection test plan. All the documentation shall be submitted to COMPANY for review prior to this meeting.

SUPPLIER shall provide CONTRACTOR with technical assistance. All recommendations made by SUPPLIER other than these outlined in datasheets or in the present specification shall be supported by a written statement from SUPPLIER head office.

8.5 Application

8.5.1 General

Paint shall always be applied to surfaces that are dry, clean and degreased, for both coating on substrate and previous coat.

Painting works shall not proceed if:

- Temperature of the substrate is less than 3°C above the dew point,
- The relative humidity is more than 85% RH (90% RH for inorganic zinc silicates),
- The weather is rainy or foggy, except under shelter, and subject to verification of the atmospheric conditions,
- The minimum or maximum temperature of the ambient atmosphere and the substrate are outwith the limits given in the product data sheets (usually 10 °C for epoxy based paint and 5 °C for acryl-polyurethane topcoat).

CONTRACTOR shall keep a daily record of the dew point, relative humidity, ambient atmosphere and substrate temperatures (all measured before the work commences and twice per shift and when ambient conditions are obviously changing) to ensure that conditions are acceptable. These records shall be kept and made available to COMPANY.

Application shall be by airless spray.

Stripe coats shall be applied by brush to all angles, corners, sharp edges, bolt or rivet heads, etc. with the same product than this to be applied on the surface to be painted. The only exception is inorganic zinc silicates where stripe coats shall be applied using the repair system primer i.e. zinc rich epoxy.

Different colours shall be used for all successive coats of the paint system. The finishing coat of the required colour shall be sufficiently opaque to cover the shade of the undercoat.

The thickness of each coat, including frequency and tolerance shall be checked by the CONTRACTOR according to [ISO 19840](#). The values shall be recorded and made available to COMPANY.

8.5.2 Zinc ethyl silicate

During application, the product shall be stirred at all times.

If relative humidity is low, it shall be sprayed with fresh water for at least two hours after application to enhance curing.

Before the subsequent coat is applied, this primer shall be subjected to a MEK test as per [ASTM D4752](#) to ensure that hydrolysis is complete. If complete hydrolysis is not obtained within eight days of application, the coating shall be completely removed and re-applied.

8.5.3 Galvanized or cadmium-plated bichromated bolting

All surfaces of the bolting shall be coated. The topcoat shall be applied after assembly is completed.

8.6 Repairs

Any defect shall be repaired before the application of further coats. Subject to the agreement of COMPANY, and after determining the type and size of the defects, the following methods of repair shall be applied:

8.6.1 Major defects

The paint shall be removed completely by abrasive blast-cleaning and the entire system shall be re-applied.

8.6.2 Minor defects (localized appearance, mechanical damage, scratches, etc.)

Subject to the agreement of the SUPPLIER of the product, the system shall be removed by localized blast-cleaning, the edges of the sound coating shall be feathered back about 50 mm, and the repair system shall be applied.

9. Checks, inspection and acceptance

9.1 Checks

Throughout the duration of the work, CONTRACTOR's Quality Control department shall check the following points and record the results in its quality control report.

- Construction quality:
 - Rounding of corners, sharp edges to 2 mm radius minimum,
 - Form, quality and continuity of welds.
- Surface preparation quality:
 - Grade of cleanliness: Sa 3 according to [ISO 8501](#),
 - Cleanliness: no grease or oil, dust level 2 maximum according to [ISO 8502-3](#).
 - Anchoring profile: G medium according to [ISO 8502](#).
- Contamination including chlorides: according to [ISO 8502-6](#) and 9, 30 mg/m² maximum.
- Climatic conditions for application: temperature of substrate at least 3 °C above dew point, maximum humidity 85% RH (90% for inorganic zinc silicates), ambient temperature (>10 °C for epoxy, >5 °C for polyurethane), weather conditions.
- State of curing of primer and of each coat.
- For inorganic zinc silicate: record of spraying with fresh water to enhance hydrolysis (if relevant) and results of MEK test: Level 5 according to [ASTM D4752](#).
- Interval between coats (in accordance to SUPPLIER product datasheets).
- Wet film thickness for each coat immediately after application.

- Number of coats, DFT of each coat and of the final system according to [ISO 19840](#).
- Appearance and colour.
- Adherence

The tests shall be carried out only when the system is completely dry and fully polymerized.

- Systems with DFT less than 200 μm : cross-cut test class 0 according to [ISO 2409](#)
- Systems with DFT above 200 μm : pull-off test according to [ISO 4624](#): Unless specified in the system sheet in Appendix 3, the minimum values acceptable are 3 MPa for checks made with mechanical equipment (type Ersad, Satec, or equivalent) and 5 MPa for checks made with hydraulic equipment (Type PAT or equivalent). The equipment must be fitted with a gauge indicating the pulling force.
- Visual inspection results: no defects such as "orange peel", cracking, bubbling, pinholes, runs and sags, blistering, etc.

9.2 Inspection test plan

An inspection test plan including all the points in section 9.1 shall be prepared and submitted to COMPANY.

9.3 COMPANY inspection

COMPANY inspector shall have free access to storage areas, workshops, yards where the works will be performed. CONTRACTOR shall also provide COMPANY inspector with all office facilities necessary for the execution of his work (telephone, fax, handling equipment, measuring instruments with valid calibration certificates, etc.).

Upon arrival of COMPANY inspector on site, CONTRACTOR shall supply him with all relevant documentation regarding the works to be carried out.

9.4 Provisional acceptance

For provisional acceptance, COMPANY shall check that all inspections set out in section 9.1 have been carried out and that all results are satisfactory.

9.5 Guarantee

The works shall be covered by a specific guarantee:

- The guarantee shall be jointly underwritten by CONTRACTOR, APPLICATOR, and SUPPLIER.
- Unless otherwise specified in Appendix 3, this guarantee shall be provided for a duration of 5 years.
- The maximum degree of rust shall be Ri2 according to [ISO 4628](#).
- The maximum degree of cracking, blistering, or flaking shall be 3S3 according to [ISO 4628](#).



9.6 Final acceptance

An inspection shall be carried out at the end of the guarantee period to determine if any claims are raised.

10. Technical file

CONTRACTOR shall hand over a technical file to COMPANY at the end of the works which shall include:

- All inspection reports.
- Provisional acceptance reports.
- Guarantee certificates.
- Insurance certificates for the guarantee.



Appendix 1 List of approved SUPPLIERS

SUPPLIER	Code	Phone No.	Fax No.	Remarks
AMERON	A	01 30-71-50-50	01-30-53-49-07	technical.nl@ameron-bv.com
CARBOLINE	C	01-60-06-55-66	01-60-06-55-70	Carboline.France @stoncor.com
HEMPEL	H	03-44-08-28-90	03-44-08-28-99	smo@fr.hempel.com
INTERNATIONAL COATINGS	I	02-35-22-13-50	02-35-22-13-52	edward.grattepanche@uk.akzonobel.com
JOTUN	J	01-45-19-38-87	01-45-19-38-94	jose.menaches@jotun.com
SIGMA COATINGS	S	04-38-49-94-30	04-38-49-94-39	Frédéric.Coulon@SigmaKalon.com

Appendix 2 List of systems

Important warning:

- Intervals between coats are given for 20°C and a relative humidity of 60 %.
- For inorganic zinc silicates, interval considers water spray for 2 hours after application.
- Systems have been certified by ACQPA where relevant (website www.acqpa.com)
- Temperatures indicated are minimum /maximum operating temperatures.

Decks			
Item	Code	System	Remarks
Structures	MA AF -010/+080	P01	
Floors	MA AF -010/+080	P02	
Helideck, escape routes of oil producing facilities	MA AF -010/+080	P03	
Fire-proofed surfaces Intumescent epoxy	MA AF -010/+080	P04 P04 ^{2nd}	The painting system must be approved by PFP supplier
Galvanized surfaces	MA AG -010/+080	P05	All galvanized surfaces, EXCEPT gratings, stairs and associated galvanized fasteners.
304, 321 SS T<80 °C	MA AI -010/+080	P05	
Other stainless steels	MA AI -010/+080	P05 2 nd	
Cd/bi Cr and Zn/bi Cr surfaces	MA AB -010/+080	P06	Above 80°C, use same system as adjacent surfaces.
High temperature	MA AF +121/+400	P11	Flare type structures

Jackets			
Item	Code	System	Remarks
Zone: 1 (Splash zone)	MA AF -010/+080	P07 P07 S nd (note 1)	Between the crest level of the 100 years wave superimposed on the maximum surge height plus the normal Mean High Water Springs (MHWS) and 3 m below the Lowest Astronomical Tide (LAT) or the annual swell, whichever is the greater;
Zone: 2 (Immersed zone) (note 2)	MA AF -010/+080	P08	Area from the bottom of the jacket (including buried part) to 2 m above the stability floor. Boat-landing, Bumpers. I tubes and J tubes of umbilicals and electrical cables. Sump caissons (internal and external). Casings of seawater lift pumps.
		P08 S nd	Subsea equipment (wellheads, manifolds, etc.). Top coat shall be light colour.
Zone: 3 (Emerg ed zone)	MA AF -010/+080	P09	Area between the crest level of the 50 years wave superimposed on the maximum surge height plus the normal Mean High Water Springs (MHWS) and the top of the structure.

Notes:

- Note1-If above 80 °C, the splash zone of flare structure shall be cladde d with Inconel 625 or Monel K500 or equivalent.
- Note 2- Immersed zone is protected against corrosion by combination of painting and cathodic protection.

Pressure vessels, piping, and exterior of storage tanks			
Item	Code	System	Remarks
Carbon steels, uninsulated			
$t \leq 80^{\circ}\text{C}$	MA AF -010/+080	P01	Extended 1.5 m down inside floating roof tanks
$81 \leq t \leq 120^{\circ}\text{C}$	MA AF +081/+120	P10	Including adjacent surfaces
$121 \leq t \leq 400^{\circ}$	MA AF +121/+400	P11	Including adjacent surfaces
Carbon steels, insulated			
$t < 89^{\circ}\text{C}$	MA AF -030/+089	P12	
$90 \leq t \leq 200^{\circ}\text{C}$	MA AF +090/+200	P13	
Other			
Vessels base structure	MA AF -010/+080	P01	
Galvanised surfaces,	MA AG -010/+080	P05	All galvanized surfaces, EXCEPT gratings, stairs and associated galvanized fasteners
304, 321 SS, $T < 80^{\circ}\text{C}$	MA AI -010/+080	P05	
Other stainless steels	MA AI -010/+080	P05 2 nd	Including 304, 321 SS $80^{\circ}\text{C} < T < 120^{\circ}\text{C}$
Cd/bi Cr or Zn/bi Cr surfaces	MA AB -010/+080	P06	Above 80°C , use same system as adjacent surfaces

Machines			
Item	Code	System	Remarks
$T < 80^{\circ}\text{C}$	MA-AF-010/+080	P14	Machinery SUPPLIER system if approved by COMPANY

Rooms			
Item	Code	System	Remarks
Opened workshops	MA AF -010/+080	P15	Bulkheads, ceilings
Air conditioned	MA AF -010/+080	P16	Walls, ceilings
Floors	MA AF -010/+080	P02	
Floors under concrete	MA AF -010/+080	P17	

Appendix 3 SUPPLIERS' systems

Coding for type of paint:

Binders	Codes	Remarks
Acrylic	AY	
Zinc ethyl silicate	ESI	
Rich Zinc epoxy	EPRZ	[Zn] > 80% (ISO 12944-5)
Poor Zinc Epoxy	EPZ	[Zn] < 80% (ISO 12944-5)
Epoxy	EP	
Phenolic Epoxy	EPPH	
Modified Epoxy	EPM	
Vinylic Epoxy	EPVI	
Ester Epoxy	EPES	
Zinc Phosphate Epoxy	EPHZ	
Tar Epoxy	Tar EP	
Glass flake Epoxy	EPGF	
Polyurethane	PUR	
Polyester	PY	
Silicone	SI	
Vinyl-ester	VY	



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 01 A
Deck and Equipment
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	50 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 02 A
Floors
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPGF	Amercoat 385 GF	200 microns	71	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	50 microns	51	85	4 hours	unlimited
Intermediate	EPGF	Amercoat 385 GF	200 microns	71	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 03 A
Helideck
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPGF	Amerlock 400GFA	350 microns	91	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP						
Intermediate	EPGF	Amerlock 400GFA	350 microns	91	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 A
Fire-Proofed Surfaces; concrete type PFP
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amerlock 400 C	150 microns	87	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amerlock 400 C	150 microns	87	85	16 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 A 2nd
Fire-Proofed Surfaces: Intumescent epoxy
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409

System No.
Coating
SUPPLIER

P 05 A
Galvanized Surfaces
AMERON

1. Surface preparation

Etching with Amercoat 59

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 06 A
Cadmium or Zinc-Plated Bichromated Surfaces
AMERON

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements

System No.
Coating
SUPPLIER

P 07 A
Jacket Zone 1
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPGF	Amerlock 400GFA	375 microns	91	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat							
Intermediate	EPGF	Amerlock 400GFA	385 microns	91	85	16 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

**P 07 A Second
Jacket Zone 1
AMERON**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPGF	Amerlock 400GFA	300 microns	91	85	16 hours	unlimited
Intermediate	EPGF	Amerlock 400GFA	300 microns	91	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPGF	Amerlock 400GFA	300 microns	91	85	16 hours	unlimited
Intermediate	EPGF	Amerlock 400GFA	300 microns	91	85	16 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 A
Jacket Zone 2
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPGF	Amerlock 400 GFA	300 microns	91	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPGF	Amerlock 400 GFA	300 microns	91	85	16 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

**P 08 A second
Jacket Zone 2
AMERON**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Amerlock 400 GFA	200 microns	91	85	16 hours	unlimited
Tie-coat							
Intermediate	EPGF	Amerlock 400 GFA	200 microns	91	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Amerlock 400 GFA	200 microns	91	85	16 hours	unlimited
Tie-coat							
Intermediate	EPGF	Amerlock 400 GFA	200 microns	91	85	16 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 09 A
Jacket Zone 3
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	200 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Amercoat 385	260 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 10 A
Surfaces Subject to High Temperatures
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Amerlock 400 AL	120 microns	85	85	16 hours	unlimited
Tie-coat							
Intermediate	EPM	Amerlock 400 AL	120 microns	85	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Amerlock 400 AL	120 microns	85	85	16 hours	unlimited
Tie-coat							
Intermediate	EPM	Amerlock 400 AL	120 microns	85	85	16 hours	unlimited
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Amercoat 450 S)

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 11 A
Surfaces Subject to High Temperatures
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat							
Intermediate	ESI	Amercoat 741	125 microns	62	85	4 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat							
Intermediate	ESI	Amercoat 741	125 microns	62	85	4 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C

Specific guarantee requirements (different from § 9.5): 1 year only

System No.
Coating
SUPPLIER

P 12 A
Insulated Surfaces
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Amercoat 385 P	150 microns	71	85	12 hours	6 months
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Amercoat 385 P	150 microns	71	85	12 hours	6 months
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C

Specific guarantee requirements (different from § 9.5): 3 years only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 13 A
Insulated Surfaces
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Amercoat 90 S	150 microns	58	85	24 hours	12 days
Tie-coat							
Intermediate	EPM	Amercoat 90 S	150 microns	58	85	24 hours	12 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Amercoat 90 S	150 microns	58	85	24 hours	12 days
Tie-coat							
Intermediate	EPM	Amercoat 90 S	150 microns	58	85	24 hours	12 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements (different from § 9.5): 1 year only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 14 A
Machines
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat	PUR	Amercoat 450 S	50 microns	58	85	4 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 15 A
Open Rooms
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 A
Air Conditioned Rooms
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI						
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

System No.
Coating
SUPPLIER

P 17 A
Sub-Concrete Floors
AMERON

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Dimetcote 19	60 microns	62	90	24 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	30 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Amercoat 68	50 microns	70	85	4 hours	unlimited
Tie-coat	EP	Amercoat 71 primer	40 microns	51	85	4 hours	unlimited
Intermediate	EPM	Amercoat 385	150 microns	71	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 01 C
Deck and Equipment
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 02 C
Floors
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate Finish coat	EPGF	Carboguard 1210	250 microns	93	85	4 hours	16 hours

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate Finish coat	EPGF	Carboguard 1210	250 microns	93	85	4 hours	16 hours

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 03 C
Helideck
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPGF	Carboguard 1210	500 microns	93	85	4 hours	16 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate	EPGF	Carboguard 1210	500 microns	93	85	4 hours	16 hours
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 C
Fire-Proofed Surfaces; Concrete type PFP
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate Finish coat	EPM	Carbomastic 15	150 microns	90	95	48 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate Finish coat	EPM	Carbomastic 15	150 microns	90	95	48 hours	unlimited

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 C 2nd
Fire-Proofed Surfaces; Intumescent epoxy
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409

System No.
Coating
SUPPLIER

P 05 C
Galvanized Surfaces
CARBOLINE

1. Surface preparation

Etching with lithoform No. 2

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 06 C
Cadmium or Zinc-Plated Bichromated Surfaces
CARBOLINE

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C

Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 07 C
Jacket Zone 1
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	40 microns	52	85	12 hours	unlimited
Intermediate Finish coat	EPGF	Carboguard 1209	375 microns	88.5	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat							
Intermediate Finish coat	EPGF	Carboguard 1209	425 microns	88.5	85	16 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

**P 07 C Second
Jacket Zone 1
CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Carboguard 193 primer	50 microns	52	85	12 hours	unlimited
Tie-coat	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	unlimited
Intermediate	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Carboguard 193 primer	50 microns	52	85	12 hours	Unlimited
Tie-coat	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	unlimited
Intermediate	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	unlimited
Finish coat							

4. Remarks

Carboguard 193 primer (facultative) - Only to protect the grit-blasting if necessary.

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C

Specific guarantee requirements (different from § 9.5): none

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 C
Jacket Zone 2
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Carboguard 890	300 microns	77	85	8 hours	unlimited
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Carboguard 890	300 microns	77	85	8 hours	unlimited
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 C second
Jacket Zone 2
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	unlimited
Tie-coat							
Intermediate	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	unlimited
Tie-coat							
Intermediate	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 09 C
Jacket Zone 3
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	200 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP						
Intermediate	EPM	Carboguard 893	250 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 10 C
Surfaces Subject to High Temperatures
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Thermaline 400Primer	120 microns	65	85	24 hours	6 days
Tie-coat	EPPH	Thermaline 400 Finish coat	120 microns	63	85	24 hours	6 days
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Thermaline 400Primer	120 microns	65	85	24 hours	6 days
Tie-coat	EPPH	Thermaline 400 Finish coat	120 microns	63	85	24 hours	6 days
Intermediate							
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Carbothane PU 134)

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 11 C
Surfaces Subject to High Temperatures
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat							
Intermediate	SI	Carboline 4631	20 microns	32.5	90	3 hours	unlimited
Finish coat	SI	Carboline 4631	20 microns	32.5	90	3 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate	SI	Carboline 4631	20 microns	32.5	90	3 hours	unlimited
Finish coat	SI	Carboline 4631	20 microns	32.5	90	3 hours	unlimited

4. Remarks

Operating temperature resistance: less than 400°C

Specific guarantee requirements (different from § 9.5): 1 year only



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 12 C
Insulated Surfaces
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Thermaline 400Primer	150 microns	65	85	24 hours	6 days
Tie-coat	EPPH	Thermaline 400 Finish coat	150microns	63	85	24 hours	6 days
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Thermaline 400Primer	150 microns	65	85	24 hours	6 days
Tie-coat	EPPH	Thermaline 400 Finish coat	150microns	63	85	24 hours	6 days
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 13 C
Insulated Surfaces
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPES	Primer 200 red-brown	60 microns	41	85	30 minutes	unlimited
Intermediate	EPES	Finish coat 200 Alu	60 microns	37	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPES	Primer 200 red-brown	60 microns	41	85	30 minutes	unlimited
Intermediate	EPES	Finish coat 200 Alu	60 microns	37	85	6 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements (different from § 9.5): 1 year only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 14 C
Machines
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat	PUR	Carbothane 134	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 15 C
Open Rooms/Workshops
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 C
Air Conditioned Rooms
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 17 C
Sub-Concrete Floors
CARBOLINE

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	30 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Carboline 658 P	50 microns	56	85	4 hours	unlimited
Tie-coat	EP	Carboguard 193 Primer	50 microns	52	85	12 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 01 H
Deck and Equipment
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	60 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	40 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 02 H
Floors
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur multi-strength 45750	200 microns	81	85	6 hours	30 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	60 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	40 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur multi-strength 45750	200 microns	81	85	6 hours	30 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 03 H
Helideck
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPGF	Hempadur GF 3587	510 microns	87	85	4 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat							
Intermediate	EPGF	Hempadur GF 3587	550 microns	87	85	4 hours	7 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 H
Fire-Proofed Surfaces; Concrete type PFP.
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	60 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 04 H 2nd
Fire-Proofed Surfaces; Intumescent epoxy PFP.
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Hempadur 1557	80 microns	54	85	4 hours	Unlimited
Tie-coat							
Intermediate							
Finish coat (above PFP)							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Hempadur 1557	80 microns	54	85	4 hours	Unlimited
Tie-coat							
Intermediate							
Finish coat (above PFP)							

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409

System No.
Coating
SUPPLIER

P 05 H
Galvanized Surfaces
HEMPEL

1. Surface preparation

Etching with lithoform n°2

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	42	85	2 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	42	85	2 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 06 H
Cadmium or Zinc-Plated Bichromated Surfaces
HEMPEL

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	42	85	2 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	42	85	2 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 07 H
Jacket Zone 1
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4554	375 microns	85	85	16 hours	5 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	60 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4554	375 microns	85	85	16 hours	5 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

07 H Second P
Jacket Zone 1
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate	EPM	Hempadur multi-strength 45750	300 microns	81	85	6 hours	30 days
Finish coat	EPM	Hempadur multi-strength 45750	300 microns	81	85	6 hours	30 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate	EPM	Hempadur multi-strength 45750	300 microns	81	85	6 hours	30 days
Finish coat	EPM	Hempadur multi-strength 45750	300 microns	81	85	6 hours	30 days

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 H
Jacket Zone 2
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPM	Hempadur multi-strength 4575	300 microns	81	85	6 hours	30 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPM	Hempadur multi-strength 4575	300 microns	81	85	6 hours	30 days

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 H second
Jacket Zone 2
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Hempadur GF 3587	200 microns	87	85	4 hours	7 days
Tie-coat							
Intermediate	EPGF	Hempadur GF 3587	200 microns	87	85	4 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Hempadur GF 3587	200 microns	87	85	4 hours	7 days
Tie-coat							
Intermediate	EPGF	Hempadur GF 3587	200 microns	87	85	4 hours	7 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 09 H
Jacket Zone 3
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	200microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588	250 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 10 H
Surfaces Subject to High Temperatures
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Hempadur 4514	120 microns	60	85	8 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4514	120 microns	60	85	8 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Hempadur 4514	120 microns	60	85	8 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4514	120 microns	60	85	8 hours	unlimited
Finish coat							

4. Remarks

Polychromy possible up to 100°C

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 11 H
Surfaces Subject to High Temperatures
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	95	24 hours	1 year
Tie-coat							
Intermediate	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited
Finish coat	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	SI	Hempel's silicone 1690	40 microns	53	85	9 hours	unlimited
Tie-coat							
Intermediate	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited
Finish coat	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements (different from § 9.5): 1 year only

System No.
Coating
SUPPLIER

P 12 H
Insulated Surfaces
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 13 H
Insulated Surfaces
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPPH	Hempadur 85671	50 microns	68	85	24 hours	21 days
Intermediate	EPPH	Hempadur 85671	50 microns	68	85	24 hours	21 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPPH	Hempadur 85671	50 microns	68	85	24 hours	21 days
Intermediate	EPPH	Hempadur 85671	50 microns	68	85	24 hours	21 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C

Specific guarantee requirements (different from § 9.5): 1 year only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 14 H
Machines
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane 5521	50 microns	50	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 15 H
Open Rooms/Workshops
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 H
Air Conditioned Rooms
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 17 H
Sub-Concrete Floors
HEMPEL

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1536	50 microns	49	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4508	30 microns	48	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 01 I
Deck and Equipment
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	40 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 02 I
Floors
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interzone 954	250 microns	85	85	12 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interzone 954	250 microns	85	85	12 hours	14 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 03 I
Helideck
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPGF	Interzone 505	500 microns	88	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EPGF	Interzone 505	550 microns	88	85	6 hours	4 days
Finish coat							

4. Remarks

Incorporate GPA 900 aggregates for non-slip system

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 I
Fire-Proofed Surfaces; Concrete type PFP
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 I 2nd
Fire-Proofed Surfaces; Intumescent epoxy PFP
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	59	85	24 hours	unlimited
Intermediate	EP						
Finish coat (above PFP)	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409

System No.
Coating
SUPPLIER

P 05 I
Galvanized Surfaces
INTERNATIONAL COATINGS

1. Surface preparation

Etching with Foscral

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 05 I second
Stainless steel as 316L, 904, duplex, ...
INTERNATIONAL COATINGS

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)
Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	VY	Interline 955	500 microns	85	80	2 hours	24 hours
Intermediate	VY	Interline 955	500 microns	85	80	2 hours	24 hours
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)
Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	VY	Interline 955	500 microns	85	80	2 hours	24 hours
Intermediate	VY	Interline 955	500 microns	85	80	2 hours	24 hours
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 06 I
Cadmium or Zinc-Plated Bichromated Surfaces
INTERNATIONAL COATINGS

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements



System No.
Coating
SUPPLIER

P 07 I
Jacket Zone 1
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interzone 954	375 microns	85	85	12 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Interzone 954	415 microns	85	85	12 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 07 I Second
Jacket Zone 1
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 08 I
Jacket Zone 2
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	300 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 08 I second
Jacket Zone 2
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	200 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate	EPM	Interzone 954	200 microns	85	85	12 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interzone 954	200 microns	85	85	12 hours	14 days
Tie-coat							
Intermediate	EPM	Interzone 954	200 microns	85	85	12 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 09 I
Jacket Zone 3
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interzone 954	200 microns	85	85	12 hours	14 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EPM	Interzone 954	250 microns	85	85	12 hours	14 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 10 I
Surfaces Subject to High Temperatures
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Intertherm 228	120 microns	67	85	16 hours	3 days
Tie-coat							
Intermediate	EPPH	Intertherm 228	120 microns	67	85	16 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Intertherm 228	120 microns	67	85	16 hours	3 days
Tie-coat							
Intermediate	EPPH	Intertherm 228	120 microns	67	85	16 hours	3 days
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Interthane 990)

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 11 I
Surfaces Subject to High Temperatures
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Intermediate	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Intermediate	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C

Specific guarantee requirements (different from § 9.5): 1 year only

System No.
Coating
SUPPLIER

P 12 I
Insulated Surfaces
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Tie-coat	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Tie-coat	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 13 I
Insulated Surfaces
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Intertherm 228	100 microns	67	85	16 hours	3 days
Tie-coat							
Intermediate	EPPH	Intertherm 228	100 microns	67	85	16 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPPH	Intertherm 228	100 microns	67	85	16 hours	3 days
Tie-coat							
Intermediate	EPPH	Intertherm 228	100 microns	67	85	16 hours	3 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C

Specific guarantee requirements (different from § 9.5): 1 year only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 14 I
Machines
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 15 I
Open Rooms/Workshops
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 I
Air Conditioned Rooms
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C



System No.
Coating
SUPPLIER

P 17 I
Sub-Concrete Floors
INTERNATIONAL COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	50 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 01 J
Deck and Equipment
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	50 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 02 J
Floors
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	200 microns	82	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	40 microns	53	85	90 minutes	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	250 microns	82	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 03 J
Helideck
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Ra 13/15 microns

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	PY	Baltoflake	800 microns	96	85	2 hours	12 hours

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	PY	Baltoflake	800 microns	96	85	2 hours	12 hours

4. Remarks

Dust with Carborex 30 aggregates on the first coat of Baltoflake while still wet (not polymerized).

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 J
Fire-Proofed Surfaces; Concrete type PFP
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 04 J 2nd
Fire-Proofed Surfaces; Intumescent epoxy PFP
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate							
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 05 J
Galvanized Surfaces
JOTUN

1. Surface preparation

Etching with lithoform No. 2

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	140 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	140 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 05 J second
Stainless steel as 316L, 904, duplex, ...
JOTUN

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)
Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	VY	Chemflake special	500 microns	96	80	2 hours	24 hours
Intermediate	VY	Chemflake special	500 microns	96	80	2 hours	24 hours
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)
Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	VY	Chemflake special	500 microns	96	80	2 hours	24 hours
Intermediate	VY	Chemflake special	500 microns	96	80	2 hours	24 hours
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 06 J
Cadmium Or Zinc-Plated Bichromated Surfaces
JOTUN

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	140 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	140 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C

Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 07 J
Jacket Zone 1
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPGF	Marathon	375 microns	80	85	12 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder		SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max (%)	Interval between coats @ 20 °C	
							min	max
Primer	EPRZ		Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat								
Intermediate	EPGF		Marathon	415 microns	80	85	12 hours	3 days
Finish coat								

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

**P 07 J Second
Jacket Zone 1
JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	PY	Baltoflake Multi	300 microns	96	85	2 hours	12 hours
Intermediate	PY	Baltoflake Multi	300 microns	96	85	2 hours	12 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	PY	Baltoflake Multi	300 microns	96	85	2 hours	12 hours
Intermediate	PY	Baltoflake Multi	300 microns	96	85	2 hours	12 hours
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 J
Jacket Zone 2
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Jotamastic 87	300 microns	82	85	10 hours	unlimited
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Jotamastic 87	300 microns	82	85	10 hours	unlimited
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 J second
Jacket Zone 2
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 09 J
Jacket Zone 3
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	200 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat							
Intermediate	EPM	Jotamastic 87	250 microns	82	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



System No.
Coating
SUPPLIER

P 10 J
Surfaces Subject to High Temperatures
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Tankguard storage	120 microns	63	85	10 hours	30 days
Tie-coat							
Intermediate	EP	Tankguard storage	120 microns	63	85	10 hours	30 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EP	Tankguard storage	120 microns	63	85	10 hours	30 days
Tie-coat							
Intermediate	EP	Tankguard storage	120 microns	63	85	10 hours	30 days
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Hardtop AS)

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 11 J
Surfaces Subject to High Temperatures
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	SI	Solvalitt	20 microns	35	85	3 hours	unlimited
Intermediate	SI	Solvalitt	20 microns	35	85	3 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	SI	Solvalitt	20 microns	35	85	3 hours	unlimited
Intermediate	SI	Solvalitt	20 microns	35	85	3 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C

Specific guarantee requirements (different from § 9.5): 1 year only



System No.
Coating
SUPPLIER

P 12 J
Insulated Surfaces
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Tankguard storage	150 microns	63	85	10 hours	30 days
Intermediate	EP	Tankguard storage	150 microns	63	85	10 hours	30 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Tankguard storage	150 microns	63	85	10 hours	30 days
Intermediate	EP	Tankguard storage	150 microns	63	85	10 hours	30 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 13 J
Insulated Surfaces
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EP	Tankguard storage	200 microns	63	85	10 hours	30 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EP	Tankguard storage	200 microns	63	85	10 hours	30 days

4. Remarks

Operating temperature resistance: less than 200°C

Specific guarantee requirements (different from § 9.5): 1 year only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 14 J
Machines
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat							
Intermediate	EPM	Primastic	150 microns	78	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat							
Intermediate	EPM	Primastic	150 microns	78	85	10 hours	unlimited
Finish coat	PUR	Hardtop AS	50 microns	50	85	5 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 15 J
Open Rooms
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	60 microns	53	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Jotamastic 87	150 microns	82	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 J
Air Conditioned Rooms
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

System No.
Coating
SUPPLIER

P 17 J
Sub-Concrete Floors
JOTUN

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Resist 86	60 microns	60	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPM	Primastic	150 microns	78	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPRZ	Barrier	50 microns	53	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate	EPM	Primastic	150 microns	78	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 01 S
Deck and Equipment
SIGMA COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC58	60 microns	65	95	12 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 02 S
Floors
SIGMA COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 03 S
Helideck
SIGMA COATINGS

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover Armour compound	3000 microns	84	85	24 hours	90 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover Armour compound	3000 microns	84	85	24 hours	90 days
Finish coat							

4. Remarks

* Non-slip granular coating.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): None
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 04 S
Fire-Proofed Surfaces; Concrete type PFP
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 04 S 2nd
Fire-Proofed Surfaces; Intumescent epoxy PFP
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate							
Finish coat (above PFP)	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate							
Finish coat (above PFP)	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

5. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 10 years for overall paint + PFP system
Qualification / acceptance requirements: Cross cut test class 0, ISO 2409



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 05 S
Galvanized Surfaces
SIGMA COATINGS-FREITAG

1. Surface preparation

Etching with lithoform No. 2

Rinsing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmacover Primer	50 microns	57	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Etching

Rinsing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmacover Primer	50 microns	57	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 06 S
Cadmium or Zinc-Plated Bichromated Surfaces
SIGMA COATINGS-FREITAG

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmacover Primer	50 microns	57	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EP	Sigmacover Primer	50 microns	57	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C

Specific guarantee requirements (different from § 9.5): Only cracking blistering, and flaking requirements



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 07 S
Jacket Zone 1
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	Sigmacover TCP glassflake	365 microns	84	85	16 hours	28 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	Sigmacover TCP glassflake	365 microns	84	85	16 hours	28 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 07 S Second
Jacket Zone 1
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPGF	Sigmacover TCP glassflake	300 microns	84	85	16 hours	28 days
Intermediate	EPGF	Sigmacover TCP glassflake	300 microns	84	85	16 hours	28 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	EPGF	Sigmacover TCP glassflake	300 microns	84	85	16 hours	28 days
Intermediate	EPGF	Sigmacover TCP glassflake	300 microns	84	85	16 hours	28 days
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 S
Jacket Zone 2
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EP	Sigmaguard CSF	300 microns	100	85	24 hours	20 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EP	Sigmaguard CSF	300 microns	100	85	24 hours	20 days

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 08 S second
Jacket Zone 2
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Tie-coat	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Tie-coat	EPGF	Sigmacover TCP glassflake	200 microns	84	85	16 hours	28 days
Intermediate							
Finish coat							

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 09 S
Jacket Zone 3
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

4. Remarks

Zone 1 Splash zone
Zone 2 Immersed zone
Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 10 S
Surfaces Subject to High Temperatures
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM miocoat (aluminium grey)	120 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM miocoat (aluminium grey)	120 microns	65	85	20 hours	unlimited
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM miocoat (aluminium grey)	120 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM miocoat (aluminium grey)	120 microns	65	85	20 hours	unlimited
Intermediate							
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Freitane 501 or Sigmadur gloss)

Operating temperature resistance: less than 120°C
Specific guarantee requirements (different from § 9.5): 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 11 S
Surfaces Subject to High Temperatures
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	SI	Sigmatherm Siloxane	30 microns	24	85	16 hours	unlimited
Intermediate	SI	Sigmatherm Siloxane	30 microns	24	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat	SI	Sigmatherm Siloxane	30 microns	24	85	16 hours	unlimited
Intermediate	SI	Sigmatherm Siloxane	30 microns	24	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C

Specific guarantee requirements (different from § 9.5): 1 year only

System No.
Coating
SUPPLIER

P 12 S
Insulated Surfaces
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Intermediate	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Intermediate	EPM	Sigmacover CM miocoat	125 microns	65	85	20 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C

Specific guarantee requirements (different from § 9.5): 3 years only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 Mpa (mechanical tester)

System No.
Coating
SUPPLIER

P 13 S
Insulated Surfaces
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Intermediate	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Tie-coat	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Intermediate	EPM	Sigmacover CM Miocoat	60 microns	65	85	20 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C

Specific guarantee requirements (different from § 9.5): 1 year only

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 14 S
Machines
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Intermediate							
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Intermediate							
Finish coat	PUR	Sigmadur gloss	50 microns	56	85	12 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 15 S
Open Rooms/Workshops
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements (different from § 9.5): none
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)



Exploration & Production

General Specification

Date: 10/04

GS COR 350

Rev: 04

Appendix 3

System No.
Coating
SUPPLIER

P 16 S
Air Conditioned Rooms
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	-	-
Tie-coat							
Intermediate							
Finish coat							

3. Repair system

Grade of cleanliness

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer							
Tie-coat							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

System No.
Coating
SUPPLIER

P 17 S
Sub-Concrete Floors
SIGMA COATINGS-FREITAG

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1: 1988)

Roughness Grit-medium (G) (ISO 8503-2: 1988)

2. Coating system

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	ESI	Sigma Tornusil MC 58	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1: 1988)

Constitution	Binder	SUPPLIER's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20 °C	
						min.	max.
Primer	EPZ	Sigmarite Zinc primer	60 microns	46	85	6 hours	6 months
Tie-coat	EP	Sigmarite Sealer	40 microns	60	85	8 hours	6 months
Intermediate	EP	Sigmacover CM coating	150 microns	65	85	20 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 Mpa (mechanical tester)

Appendix 4 Colour coding

1. Colours

Basic colours are:

- Yellow – RAL 1003
- Black – RAL 9005
- Red – RAL 3001
- Aluminium grey for high temperature

2. Piping identification:

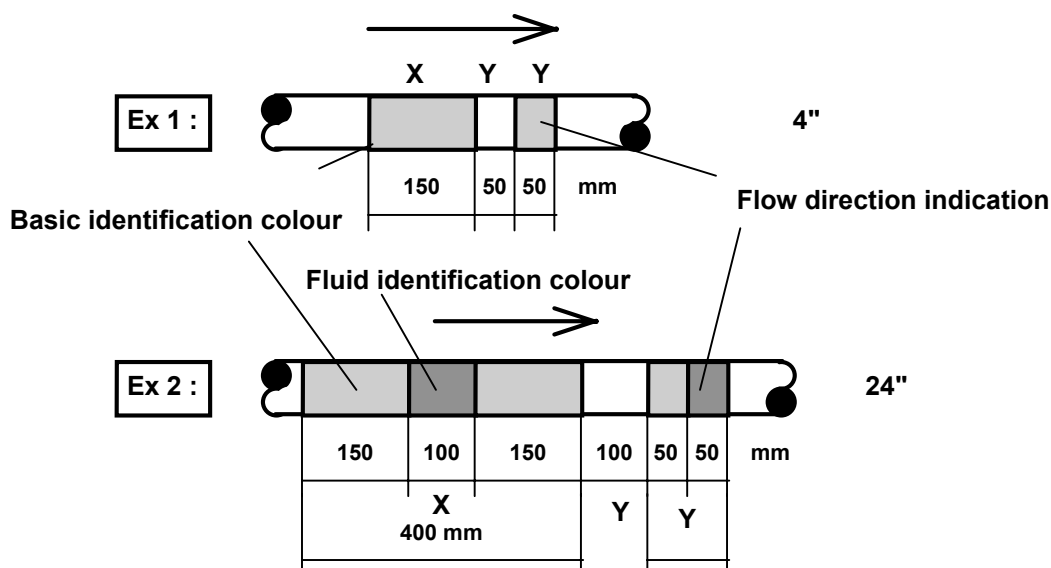
Pipes shall be identified according to carried fluid as stipulated in the attached colour coding tables.

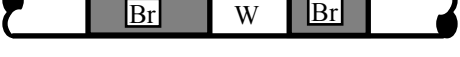
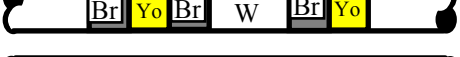
Note 1: The basic identification colour shall be sprayed as a band X mm wide around the pipe at a maximum of 2 m intervals and on either side of each valve, fitting, wall penetration and any other places where identification of the fluid is necessary.

Note 2: The fluid identification colour shall be sprayed as a band Y mm wide all around the pipe and placed in the middle of the basic identification colour.

Note 3: Code indications, (i.e. information regarding the nature of the fluid and direction of flow arrows), shall be painted in black letters on the white pipe background adjacent to the basic identification colour band. The flow direction shall be indicated by a repetition of the basic and fluid identification colours sprayed downstream at Y mm apart and Y mm wide, as shown below.

PIPE O. D.				
	<= 6"	>6"- =<12"	>12"- =<24"	> 24"
X mm	150	250	400	600
Y mm	50	75	100	150



SERVICE	PIPELINE MARKING	FLOW DIRECTION
		
CRUDE OIL		HC
DIESEL OIL		DO
HYDRAULIC OIL		HO
LUBE OIL		LO
SEAL OIL		SO
HELIFUEL		HE
CONDENSATE / NGL		CD
NAPHTA		NH
PROCESS GAS		PG
FLARE GAS		FL
HYDROCARBON (GAS)		HG
FUEL GAS		FG
GAS INJECTION		GI
EXHAUST		EX
INERT GAS		IG
INSTRUMENT AIR		IA
PLANT AIR		PA
ATMOSPHERIC VENT		ATH
HALON GAS		HLG
GLYCOL		GLC

SERVICE	PIPELINE MARKING	FLOW DIRECTION →
METHANOL		ME
FREON		F
CHEMICAL INJECTION		CL
H. P. STEAM		SH
L. P. STEAM		SL
L. P. STEAM CONDENS.		SC
WATER INJECTION		WI
SEA WATER		SW
PROCESS WATER		PW
COOLING WATER		CW
FIRE WATER		FW
DRINKING WATER		DW
UTILITY/FRESH WATER		UW
COLD WATER SERVICE		CWS
CHILLED WATER		CHW
HOT WATER SERVICE		HWS
WASTE SEWAGE		WS
OILY WATER		OL
OPEN DRAIN		OD
HYDRO. CLOSED DRAIN		DR

SERVICE	PIPELINE MARKING	FLOW DIRECTION
		
WASTE OIL DRAIN		DR
CEMENT LIQUID		CE
BULK BARYTES		BB
BULK CEMENT		BC
HIGH PRES. CEMENT		HPC
L. P. OIL MUD		LM
MUD OIL		MO
H.P. OIL MUD		HM
KILL FLUID		KF

3. Colour for topcoat of all other equipment and platform areas

3.1 Exterior

Jacket zone 2 (immersed)	Traffic grey
Jacket zone 1 (splash zone) including casings	Brown
Jacket zone 3 (emerged)	Yellow
Pipe supports	Same as surrounding structure
Lighting posts	White
Guard rails (Handrails)	White
Pedestal cranes (moving parts)	Red/white stripes
Pedestals	Same as surrounding structure
Bridge structure	Yellow
Tanks, vessels, heat exchangers	White
Pipework	Base colour: white Identification (See Appendix 2 above)
All equipment and packages	Light grey
Internal walls/ceilings of equipment enclosures	White
Internal flooring of equipment enclosures	Brown red
Fire pump enclosures: External walls	Red
Internal walls & ceiling	White

Control Panels	Light grey
Moving parts and overhead obstructions	Red/white stripes
Fire fighting equipment and piping	Red
Stairways and associated structures	White
Runway beams (external and internal)	Yellow/black stripes
Escape routes (external and internal)	Black/yellow stripes
Drilling derricks and radio tower	Red/white stripes
Floors, decks and walkways	Brown red
Doors	Green
Buildings, walls, doors & window frames (except for Fire Pump Enclosures)	White
Helideck structural	Yellow
Helideck Surface	Green
Helideck markings	White/yellow
Life boat davits	Yellow
Grating	Same as support frame colour
Netting framing	White
Flare (excepted top of flare to be aluminium)	Red/white

3.2 Interior of Technical Areas/Buildings

Structural Steel	Yellow
Cladding and Ceiling *	White
Floors *	Brown red
Tanks, Vessels, Heat exchangers and pipework	White Piping identification: see section 2
Pumps and Motors	Light grey
Skids and Packages	Light grey
Main generator and emergency generator packages	Light grey
Compressor Enclosures	Light grey
Control Panels, gearswitch, and transformers	Light grey
Fire Fighting Equipment (inc. diesel engine and piping)	Red
Doors	Green
First Aid Box	Green
Instruments	Manufacturer's standard
Moving parts and overhead obstructions	Red/white stripes
Escape Routes	Black/yellow stripes



- * Except Control Room, Technical Room, Laboratories and other specific areas. Colour choice for these to be determined based on Vendor's standard systems or COMPANY requirements.

Interior of **living quarter modules and offices** to be submitted to COMPANY approval.

2.4 Colours

The Colours specified shall be in accordance to RAL K1. SUPPLIER colour names or reference numbers shall not be used as reference.

Colour	Code for pipeline marking	RAL Reference
Yellow	Y	1003
Red	R	3001
Brown red	BR	3009
Light blue	LB	5015
Dark blue	DB	5003
Light grey	LG	7035
Traffic grey	TG	7042
White	W	9010
Black	Bl	9005
Green	G	6001
Violet	V	4005
Yellow ochre	Yo	1006
Brown	Br	8003
Silver grey	S	7001