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TECHNICAL INFORMATIVE NOTE
GUIDE TO COATING OF STEEL UPON CORROSION CLASS (ACCORDING WITH NORM ISO 12944)
PART 1 : CHEMICALLY TREATED SURFACES

EDITION 01 - 2014

Class according ISO 12944 Corrosivity level	C1 Very low	C2 Low	C2 Low	C3 Medium	C3 Medium	C4 High	C4 High	C5 Very high	C5-I Very high industrial	C5-M Very high marine
Indoor / Outdoor Environment type Pollution level Humidity Salinity	Indoor /// Low Low Low	Indoor /// Low Low Low	Outdoor Rural Low Moderate Low	Indoor Urban , industrial Moderate Moderate Low	Outdoor Urban , industrial , coastal Moderate High Moderate	Indoor Urban , industrial High High Low	Outdoor Urban , industrial , coastal High High Moderate	Indoor / Outdoor Specific atmosphere High to very high High to very high High to very high	Outdoor Industrial High to very high High to very high High to very high	Outdoor Offshore marine High to very high High to very high High to very high
Typical working life conditions	Heated civil buildings (Schools , offices stores , homes)	Non heated buildings with condensation risk (Warehouses , sporthalls , gyms)	Country outdoor exposure (Farms)	Industrial buildings with moderate humidity (Laundries , dairies , food industries)	Industrial buildings with moderate humidity (Laundries , dairies , food industries)	Indoor aggressive environments (Swimming pools , working places)	Outdoor aggressive environments (Shipyards , coastal pools)	Parts of buildings submitted to very aggressive atmosphere or contact with chemicals	Very aggressive atmosphere or contact with chemicals	Off-shore plants
Minimal chemical pre-treatment suggested for the support	Amorphous ferrous phosphatization	Amorphous ferrous phosphatization	Amorphous ferrous phosphatization	Cristalline zinc phosphatization with passivation	Cristalline zinc phosphatization with passivation	Cristalline zinc phosphatization with passivation	Cristalline zinc phosphatization with passivation	Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
Suggested primer	Not necessary	Not necessary	Zinc rich primers B920HT3 B91FKBY 70 mic	Zinc-free primers B921GSP B910GRZ 70 mic	Zinc rich primers B920HT3 B91FKBY 70 mic	Zinc rich primers B920HT3 B91FKBY 70 mic Note 1	Zinc rich primers B920HT3 B91FKBY 70 mic Note 1	Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
Suggested topcoat	Hybrids H E K F G L X PH Epoxy B PE 70 mic	Hybrids H E K F G L X PH Epoxy B PE 70 mic		Hybrids H E K F G L X PH Epoxy B PE 70 mic		Hybrids H E K F G L X PH Epoxy B PE 70 mic		Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Industrial polyesters Y2 Y3 Y4 Z PP Homologated polyesters Y5 Superdurable polyesters J 70 mic	Specific project Contact arsonsisi	Specific project Contact arsonsisi

NOTES

- Note 1 : in case of specific requirements an additional layer of zinc-free primer between zinc rich primer and topcoat could be adopted

GENERAL RECOMMENDATIONS

- Some metallic effects may require specific pigments having moderate outdoor resistance , therefore some colour /effect limitation is possible in aggressive environments
- Always refer to Specific Technical Data Sheets , available on request for each single arsonsisi code
- Always contact arsonsisi lab in any case requiring further informations
- All the suggestions contained in this form are merely given as a general information and they do not represent a warranty on products or on coating systems
- arsonsisi s.p.a. maintains the right to update and to modify this document at any moment , upon any new experiences and knowledge



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TECHNICAL INFORMATIVE NOTE
GUIDE TO COATING OF STEEL IN CORROSIVE ENVIRONMENTS (ACCORDING WITH NORM ISO 12944)
PART 2 : MECHANICALLY TREATED SURFACES

EDITION 01 - 2014

Class according ISO 12944 Corrosivity level	C1 Very low	C2 Low	C2 Low	C3 Medium	C3 Medium	C4 High	C4 High	C5 Very high	C5-I Very high industrial	C5-M Very high marine
Indoor / Outdoor Environment type Pollution level Humidity Salinity	Indoor /// Low Low Low	Indoor /// Low Low Low	Outdoor Rural Low Moderate Low	Indoor Urban , industrial Moderate Moderate Low	Outdoor Urban , industrial , coastal Moderate High Moderate	Indoor Urban , industrial High High Low	Outdoor Urban , industrial , coastal High High Moderate	Indoor / Outdoor Specific atmosphere High to very high High to very high High to very high	Outdoor Industrial High to very high High to very high High to very high	Outdoor Offshore marine High to very high High to very high High to very high
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Mechanical preparation suggested for the support in case of no chemical pre-treatment	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	grit-blasting SA 2 - 2,5 Ra 5 - 12 micr	Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
Suggested primer layer	Not mandatory ; on porous substrates inert primer or preliminary degassing are suggested	Not mandatory ; On porous substrates inert primer or preliminary degassing are suggested	Zinc rich primers B920HT3 B91FKBY 70 mic	Zinc rich primers B920HT3 B91FKBY 70 mic	Zinc rich primers B920HT3 B91FKBY 70 mic	Zinc rich primers B920HT3 B91FKBY 70 mic Note 1	Zinc rich primers B920HT3 B91FKBY 70 mic Note 1	Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
Suggested topcoat	Hybrids H E K F G L X PH	Hybrids H E K F G L X PH		Hybrids H E K F G L X PH		Hybrids H E K F G L X PH		Specific project Contact arsonsisi	Specific project Contact arsonsisi	Specific project Contact arsonsisi
	Epoxy B PE 70 mic	Epoxy B PE 70 mic		Epoxy B PE 70 mic		Epoxy B PE 70 mic				
	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Industrial polyesters Y2 Y3 Y4 Z PP	Specific project Contact arsonsisi	Specific project Contact arsonsisi
Homologated polyesters Y5	Homologated polyesters Y5	Homologated polyesters Y5	Homologated polyesters Y5	Homologated polyesters Y5	Homologated polyesters Y5	Homologated polyesters Y5				
Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic	Superdurable polyesters J 70 mic			

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