

13. DEW POINT TABLES

One of the most critical aspects of applied coating quality, as well as corrosivity of atmospheres is the dew point, or the point at which a steel surface becomes wet with condensation. For reference, this Dew Point Table lists Dew Point over a range of relative humidities and air temperatures.

To allow a practical safety margin, steel substrate temperature should be at least 3°C above the Dew Point. The Dew Point is the temperature of an air-water vapor mixture at which condensation of water vapor starts, as at that point, the air becomes saturated.

Some solvent-based paints are water intolerant and should not be applied unless the surface is at the specified level above the Dew Point. Some other coatings, which are moisture cured, cannot be applied in conditions of low humidity and high temperature as this affects their curing.

The Dew Point is an important factor in corrosion of metals as it is a major determinant of Time of Wetness. Moisture is required to allow any electrochemical corrosion processes to occur, and is thus one of the most significant criteria used for corrosion modeling.

AIR TEMP. °C	DEW POINT IN °C AT RELATIVE HUMIDITY LISTED								
	50%	55%	60%	65%	70%	75%	80%	85%	90%
16	5.6	7.0	8.3	9.5	10.5	11.6	12.5	13.5	14.4
17	6.5	7.9	9.2	10.4	11.5	12.5	13.5	14.5	15.3
18	7.4	8.8	10.2	11.4	12.4	13.5	14.5	15.4	16.3
19	8.3	9.7	11.1	12.3	13.4	14.5	15.5	18.4	17.3
20	9.3	10.7	12.0	13.3	14.4	15.4	16.4	17.4	18.3
21	10.2	11.6	12.9	14.2	15.3	16.4	17.4	18.4	19.3
22	11.1	12.5	13.8	15.2	16.3	17.4	18.4	19.4	20.3
23	12.0	13.5	14.8	16.1	17.2	18.4	19.4	20.3	21.3
24	12.9	14.4	15.7	17.0	18.2	19.3	20.3	21.3	22.3
25	13.8	15.3	16.7	17.9	19.1	20.3	21.3	22.3	23.2
26	14.8	16.2	17.6	18.8	20.1	21.2	22.3	23.3	24.2
27	15.7	17.2	18.6	19.8	21.1	22.2	23.2	24.3	25.2
28	16.6	18.1	19.5	20.8	22.0	23.2	24.2	25.2	26.2
29	17.5	19.1	20.5	21.7	22.9	24.1	25.2	26.2	27.2
30	18.4	20.0	21.4	22.7	23.9	25.1	26.2	27.2	28.2





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SPECIFIERS MANUAL

01	SPECIFIERS MANUAL
02	INDUSTRIAL GALVANIZERS COMPANY PROFILE
03	ADHESION OF PROTECTIVE COATINGS
04	BOLTING GALVANIZED STEEL
05	BURIED GALVANIZED STEEL
06	CONCRETE DURABILITY & GALVANIZED REBAR
07	CORROSION MAPPING
08	COST FACTORS FOR HOT DIP GALVANIZED COATINGS
09	CUSTOM COATING PACKAGES
10	CUT EDGE PROTECTION
11	DESIGNING FOR GALVANIZING
12	ILLUSTRATED GUIDE TO DESIGN FOR GALVANIZING
13	DEW POINT TABLES
14	DIFFICULT STEELS FOR GALVANIZING
15	DOCUMENTATION - CORRECT PAPERWORK ENSUES EFFICIENT PROCESSING
16	ENVIRONMENTAL ISSUES FOR INDUSTRIAL COATINGS
17	ZINC, HUMAN HEALTH AND THE ENVIRONMENT
18	DEFECTS IN GALVANIZED COATINGS
19	GALVANIC SERIES
20	GLOSSARY OF GALVANIZING TERMS
21	GUARANTEES FOR HOT DIP GALVANIZED COATINGS
22	LIFE CYCLE COSTS OF INDUSTRIAL PROTECTIVE COATING SYSTEMS
23	PAINING OVER GALVANIZED COATINGS
24	POWDER COATING OVER GALVANIZED COATINGS
25	QUALITY AND SERVICE FACTORS AFFECTING GALVANIZED COATINGS
26	RESTORATION OF PREVIOUSLY GALVANIZED ITEMS
27	REPAIR OF GALVANIZED COATINGS
28	STEEL STRENGTH AND HOT DIP GALVANIZING
29	STANDARDS - AS/NZS 4680:2006
30	STANDARDS - AUSTRALIAN AND INTERNATIONAL STANDARDS
31	STEEL SURFACE PREPERATION
32	SURFACE PREPERATION FOR PAINTING HOT DIP GALVANIZED COATINGS
33	THICKNESS MEASUREMENT OF PROTECTIVE COATINGS
34	WELDING GALVANIZED STEEL
35	AN INTRODUCTION TO THE HOT DIP GALVANIZING PROCESS
36	ZINC COATING PROCESSES - OTHER METHODS
37	GALVANIZED COATINGS AND BUSHFIRE
38	LIQUID METAL ASSISTED CRACKING OF GALVANIZED STRUCTURAL STEEL SECTIONS
39	GALVANIZING 500N GRADE REINFORCING BAR
40	PREDICTING THE LIFE OF GALVANIZED COATINGS
41	CHEMICALS IN CONTACT WITH GALVANIZED COATINGS.
42	ATMOSPHERIC CORROIVITY ASSESSMENT
43	GLOBAL WARMING - CLIMATE CHANGE AND GALVANIZING
44	STEEL - ITS CORROSION CHARACTERISTICS
45	GALVANIZED STEEL AND TIMBER
46	WHITE RUST PREVENTION AND TREATMENT

01 - SPECIFIERS MANUAL – THIRD EDITION

Industrial Galvanizers Australian Galvanizing Division (IGAG) operates nine galvanizing plants around Australia, ranging in size from large structural galvanizing facilities to specialised small plants designed to process small parts.

The Australian Galvanizing Division has galvanized in excess of 2 million tonnes of steel products in Australia since its first plant was commissioned in 1965 and is recognized for its ability to handle complex and difficult projects, as well as routine contracts.

This experience has been collated in the Specifiers Design Manual, to assist those involved in the design of steel products and projects to better understanding the galvanizing process and allow the most durable and cost-effective solutions to be delivered to these products and projects. All sections of this Third Edition have been completely updated and additional sections have been included to provide additional technical information related to the use of hot dip galvanized steel.

In addition to its Australian Galvanizing operations, Industrial Galvanizers Corporation has a network of manufacturing operations in Australia, as well as galvanizing and manufacturing businesses throughout Asia and in the USA.

The company's staff in all these locations will be pleased to assist with advice on design and performance of hot dip galvanized coatings and products. Contact details for each of these locations are located elsewhere in this manual.

This edition of the Industrial Galvanizers Specifiers Manual has been produced in both html and .pdf formats for ease of access and distribution and all documents in the Manual are in .pdf format and can be printed if paper documents are required.

The Specifiers Manual is also accessible in its entirety on the company's web site at www.ingal.com.au.

Additional copies of the Specifiers Manual are available on CD on request.

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Industrial Galvanizers Australian Galvanizing Division,
PO Box 503, MOOROOKA
QLD 4105
Ph: 07 38597418

EDITOR:

John Robinson,
Mount Townsend Solutions Pty Ltd
PO Box 355, JESMOND NSW 2299
Ph: 0411 886 884
Email: mt.solutions@optusnet.com.au

LAYOUT AND DESIGN:

Adrian Edmunds,
Nodding Dog Design
Ph: 0402 260 734
Email: adrian@noddingdogdesign.com
Web: www.noddingdogdesign.com