AUSTRALIAN SALT MARINE CLASSIFICATIONS

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INTRODUCTION

In a country the size of Australia with its extensive coastline, a wide range of marine environments exist. Such environments range from heavy breaking surf and open bays, to calm harbours, lakes and river estuaries.

There are a wide range of factors that may affect the influence of a marine environment ranging from geography and terrain to prevailing winds and currents.

When building in a marine environment, these factors must be considered when assessing the impact the environment may have on service life of building components.

AUSTRALIAN MARINE CLASSIFICATIONS

BlueScope Steel has attempted to classify the wide range of Australian marine types into three (3) primary categories (based on AS/NZS 2312:2002 guidelines), for the purpose of simplifying the process for assessing likely marine influence and selection of appropriate BlueScope Steel product.

The table below contains definitions for surf marine, exposed marine and calm marine localities around Australia. Examples for each of these marine types, in both metropolitan and regional areas, are also provided for reference purposes and serve as a **GUIDE ONLY** for the selection of appropriate BlueScope Steel products.

DEFINITIONS

Surf: Areas exposed to breaking surf and ocean spray

Exposed: Open expanses of salt or brackish water exposed to onshore winds, but not typically

prone to breaking surf

Calm: Protected areas of salt or brackish water, including ports, harbours, bays and

river estuaries

CLASSIFICATION			EXAMPLE LOCATION
NSW	Metro	Surf	Manly Beach or Bondi Beach
		Exposed	Botany Bay, Sydney Harbour (East of Harbour Bridge), Kurnell
		Calm	Darling Harbour, Parramatta River
	Regional	Surf	Open Pacific Beaches, (Coffs Harbour, Newcastle, Bulli)
		Exposed	Protected coastal waters (Jervis Bay, Port Stephens)
		Calm	Ports/Harbours (Port Hunter at Newcastle, Inner Harbour at Port Kembla), Saltwater Lakes (Lake Macquarie, Lake Illawarra)
		Surf	Bribie Island, Miami & Southport Beaches
QLD	Metro	Exposed	Redcliffe, Cleveland, Fisherman's Island - Moreton Bay The Broadwater (Gold Coast)
		Calm	Gold Coast Canal Estates
	Regional	Surf	Bargara, Mackay
		Exposed	Hervey Bay - protected by Fraser Island, Cairns & Townsville Strand areas
	Re	Calm	Twin Waters Canal Estates

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CLASSIFICATION			EXAMPLE LOCATION
VIC		Surf	Bass Strait (Mornington Peninsula)
	Metro	Exposed	Port Phillip Bay (Altona to Portsea Beaches)
	Me	Calm	Port Phillip Bay (Williamstown), Yarra River (Docklands and Melbourne CBD), Maribyrnong River
	Te.	Surf	Open Bass Strait Surf Beaches (Warrnambool, Lorne, South coastline Phillip Island, Venus Bay, Seaspray)
	Regional	Exposed	Bellarine Peninsula, Eastern Shoreline of Westernport Bay, North Coastline Phillip Island, Anderson Inlet at Inverloch
	巫	Calm	Geelong Coastline, Anderson Inlet East of Inverloch, Corner Inlet to Port Albert, Gippsland Lakes (Paynesville, Metung), Lakes Entrance
WA	Metro	Surf	Scarborough Beach, Leighton / Port Beach, Cottesloe Beach
		Exposed	Cockburn Sound, Safety Bay
		Calm	Swan River (west of Narrows)
	Regional	Surf	Cable Beach (Broome), Smith's Beach (Yallingup), Singleton Beach
	gio	Exposed	Geographe Bay, Roebuck Bay (Broome)
	Re	Calm	Leschenault Inlet (Bunbury), Hardy Inlet (Augusta), Peel Inlet
SA	0	Surf	N/A
	Metro	Exposed	Adelaide coastline (West Beach, Glenelg, Semaphore)
		Calm	Port River (Port Adelaide), West Lakes waterways
	Regional	Surf	Middleton / Port Elliot surf beaches, Robe
	gio_	Exposed	Upper coastline of Spencers Gulf (Port Augusta, Port Pirie)
	Re	Calm	Hindmarsh Island Marina
TAS	0	Surf	N/A
	Metro	Exposed	Derwent River south of Tasman Bridge
		Calm	Constitution Dock (Hobart), Tamar River (Launceston)
	nal	Surf	Devonport, Somerset, Bicheno, Clifton Beach, Flinders and King Islands
	Regional	Exposed	Tamar Estuary (Georgetown), Coles Bay, Stanley Wharf
	Re	Calm	Strachan, St. Helens, Triabunna
LX	0	Surf	N/A
	Metro	Exposed	Darwin Harbour
		Calm	Cullen Bay marina, Bayview waterways
	nal	Surf	N/A
	Regional	Exposed	Gove, Nhulunbuy, Tiwi Islands, Dundee Beach
	R	Calm	N/A

NOTES:

- The areas listed above are considered to be general examples that typify each of the three marine classifications. However, it should be noted that specific areas located within the above regions may fall outside of the marine classification in which the region has been included.
- The ACT has not been included in the above table because the influence of Lake Burley Griffin is not considered salt marine in nature.
- Compliance with the information above does not guarantee eligibility for a BlueScope Steel warranty.
- Please contact your nearest BlueScope Steel State Office for further information regarding

- marine classifications that may apply to your specific project.
- For further terms and conditions regarding the use of BlueScope Steel products, please visit <u>www.bluescopesteel.com.au</u> or call BlueScope Steel Direct on 1800 800 789 or contact your BlueScope Steel State Office

Prevailing winds, shelter, elevation above the marine influence and unwashed areas eg. walls and eaves, are a few of the factors that may impact on the corrosive nature of a particular site. The essential thing to do is consult with your materials supplier or BlueScope Steel Sales Office for the best advice on the most appropriate choice of COLORBOND® steel, ZINCALUME® steel or TRUECORE® steel product.



The information and advice contained in this Bulletin is of a general nature only, and has not been prepared with your specific needs in mind. You should always obtain specialist advice to ensure that the materials, approach and techniques referred to in this Bulletin meet your specific requirements.

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