# Special environments

In New Zealand there are areas where local conditions create an increased likelihood of corrosion. Special consideration should be given to material selection in these areas.

#### **GEOTHERMAL AREAS**

Hydrogen sulphide associated with geothermal activity creates a corrosive environment. Variations in natural activity or draw-off from steam bores plus the effects of weather conditions make the high risk areas hard to define.

#### WEST COAST, SOUTH ISLAND

In this area, smoke from coal burning fires may cause high concentrations of sulphur dioxide in the air. The combination of this and the high rainfall for the region creates an aggressive situation which must be considered when choosing the appropriate COLORSTEEL® prepainted steel coating. The effects of a severe coastal environment aggravate the situation.

This area combines the most severe features of both industrial and coastal environments. Please contact your local supplier for advice about the best COLORSTEEL® prepainted steel product to use.

#### **INTERNAL ENVIRONMENTS**

Some commercial or agricultural applications may create internal environments in which the build-up of pollutants or fumes is a potential source of corrosion. Similarly a corrosive environment can develop within sheds for intensive animal farming. Please contact New Zealand Steel for more information.

#### **INDUSTRIAL ENVIRONMENTS**

Environments close to corrosive industrial emissions and subject to heavy fallout from them require extra consideration. Please contact New Zealand Steel for more information.

#### **FURTHER ASSISTANCE**

Further advice on the selection of the appropriate product to suit your particular location is available from New Zealand Steel or your local COLORSTEEL® prepainted steel supplier.

# Considerations

#### **IMPORTANT**

- As product use is dictated by local conditions, seek advice from your roofing supplier or fixer for the best New Zealand Steel product to suit your specific environment.
- Gutters should be installed according to manufacturer's instructions.
- Unwashed and high risk areas require manual washing every 3 months.

#### NON-RESIDENTIAL WARRANTY

For applications like schools, warehouses and other commercial buildings please contact New Zealand Steel. The maximum warranty offered on commercial buildings is 15 years.



Environmental Categories, Warranty & Product Maintenance Recommendations

STEEL ROOFING AND CLADDING

For more information about warranties and maintenance, please call **0800 100 523** or visit **nzsteel.co.nz** 







# New Zealand has a wide range of environmental conditions.

From the harsh west coast beaches, to the relative shelter of the Waikato farming region, New Zealand Steel offers a range of coated steel products that are suitable for most locations.

- Eligible for a residential warranty.
- Not eligible for a residential warranty.
- <sup>1</sup> Against perforation as a result of corrosion.
- <sup>2</sup> Covering the paint surface against flaking, peeling and excessive fade.

## **VERY SEVERE** ISO CATEGORY 5



**ISO Category 5** starts 50m from high water on east coast, 100m from high water on west coast characterised by:

- Heavy salt deposits.
- The almost constant smell of salt spray in the air.
- Close to breaking surf such as is

found on exposed coasts (typically starts 50 – 100 metres).

This environment may be extended inland by prevailing winds and local conditions.

## **SEVERE** ISO CATEGORY 4



#### **ISO Category 4** characterised by:

- Light salt deposits.
- A frequent smell of salt in the air.
- Typically starts 100 500 metres from breaking surf such as is found on exposed coasts.

 In the immediate vicinity of large expanses of calm salt water such as harbour foreshores.

This environment may be extended inland by prevailing winds and local conditions.

## **MODERATE** ISO CATEGORY 3 & 2



#### **ISO Category 3** characterised by:

- Little or no salt deposits.
- The occasional smell of salt in the air.
- Typically starts 500 1000 metres from breaking surf such as is found on exposed coasts, or in the immediate vicinity of calm salt water such as estuaries.

#### **ISO Category 2** characterised by:

- No obvious marine or industrial influences.
- Typically more than 1000 metres from the exposed coasts or more than 500 metres from industrial emissions.

				WALL CLADDING	ROOFING	GUTTER DOWNPIPES	FASCIA	WALL CLADDING	ROOFING	GUTTER DOWNPIPES	FASCIA	WALL CLADDING	ROOFING	GUTTER DOWNPIPES	FASCIA
	COLDESTREEL.  MOXX®  FOR EXTREME CONDITIONS	RESIDENTIAL WARRANTIES	PERFORATION¹	15 YEARS	15 YEARS	10 YEARS	15 YEARS	15 YEARS	20 YEARS	10 YEARS	15 YEARS	15 YEARS	30 YEARS	10 YEARS	15 YEARS
			PAINT <sup>2</sup>	15 YEARS	15 YEARS	10 YEARS	10 YEARS	15 YEARS	15 YEARS	10 YEARS	10 YEARS	15 YEARS	18 YEARS	10 YEARS	10 YEARS
		MAINTENANCE		Rain washing plus manual washing every 3 months	Rain washing	Manual washing every month	Manual washing every month	Rain washing plus manual washing every 6 months	Rain washing	Manual washing every 3 months	Manual washing every 3 months	Rain washing plus manual washing every year	Rain washing	Manual washing every 6 months	Manual washing every 6 months
	COLORSTEEL.  ENDUZO®  FOR ENDURING PERFORMANCE	RESIDENTIAL WARRANTIES	PERFORATION¹						15 YEARS	10 YEARS	15 YEARS	15 YEARS	30 YEARS	10 YEARS	15 YEARS
			PAINT <sup>2</sup>						15 YEARS	5 YEARS	5 YEARS	15 YEARS	18 YEARS	10 YEARS	10 YEARS
		MAINTENANCE		Not recommended in this environment					Rain washing	Manual washing every 3 months	Manual washing every 3 months	Rain washing plus manual washing every year	Rain washing	Manual washing every 6 months	Manual washing every 6 months
	Zincalume®	RESIDENTIAL WARRANTIES	PERFORATION¹									15 YEARS	15 YEARS	10 YEARS	10 YEARS
		MAINTENANCE		Not recommended in this environment				Not recommended in this environment				Rain washing plus manual washing every 6 months	Rain washing	Manual washing every 3 months	Manual washing every 3 months
-2-	GALVSTEEL®	RESIDENTIAL WARRANTIES	NO WARRANTY												
		MAINTENANCE		Not recommended in this environment				Not recommended in this environment				Rain washing plus manual washing every 6 months. Painting may be advisable depending on the specific location	Rain washing	Manual washing every 3 months. Painting may be advisable depending on the specific location	Manual washing every 3 months. Painting may be advisable depending on the specific location
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