

Ingress Protection

Hazardous area standards generally state a minimum IP rating of IP54 or NEMA 3. However, it is essential when selecting Redapt's products to ensure that the product will maintain the IP or NEMA rating of the equipment and the integrity of the installation.

The following table contains definitions detailing the environmental protection levels that Redapt products are capable of maintaining:

IP Codes are based on the IEC Standard 529 – Degrees of protection provided by enclosures

IP 54	<ul style="list-style-type: none">• Dust protected. Prevents ingress of dust sufficient to cause harm.• Protected from splashing water from any direction.
IP 66	<ul style="list-style-type: none">• Dust tight. No ingress of dust possible.• Protected against heavy seas or powerful jets of water. Prevents ingress sufficient to cause harm.
IP 67	<ul style="list-style-type: none">• Dust tight. No ingress of dust possible.• Protected against harmful ingress of water when immersed between a depth of 150mm to 1m.
IP 68	<ul style="list-style-type: none">• Dust tight. No ingress of dust possible.• Protected against submersion. Suitable for continuous immersion in water at stated depth. (Depth stated for Redapt products = 2m)

North American and Canadian markets define environmental protection as CSA and NEMA Enclosure Types

Type 3	<ul style="list-style-type: none">• Type 3 enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust; and damage from external ice formation.
Type 4	<ul style="list-style-type: none">• Type 4 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against wind blown dust and rain, splashing water, hose directed water; and damage from external ice formation.
Type 4X	<ul style="list-style-type: none">• Type 4X enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, wind blown dust and rain, splashing water, hose directed water; and damage from external ice formation.
Type 6	<ul style="list-style-type: none">• Type 6 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during occasional temporary submersion at a limited depth; and damage from external ice formation.
Type 6P	<ul style="list-style-type: none">• Type 6P enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against hose directed water, the entry of water during prolonged submersion at a limited depth; and damage from external ice formation.

As a general guide to selecting the sealing method most likely to be suitable for the different entry types Redapt suggest:

- **Clearance Holes** - Integral 'O' Ring Seal
- **Parallel Threaded Entries** - Integral 'O' Ring Seal
- **Taper Threaded Entries** - Non-hardening Thread Sealant
(Thread sealant is available from Redapt).

Product Range	Entry Type	Sealing Method	IEC				CSA (NEMA)		
			IP 54	IP 66	IP 67	IP 68	3	4/4X	6/6P
Redapt products supplied c/w Integral 'O' Ring Seal									
ADAPTORS & REDUCERS <i>(Dual Metallic and Glass Filled Nylon)</i>									
AD-U	Clearance	Integral	✓	✓	✓	✓	✓	✓	✓
RD-U	Threaded	Integral	✓	✓	✓	✓	✓	✓	✓
<hr/>									
AD-E-4	Clearance	Integral	✓	✓	✓	✓	✓	✓	✓
RD-E-4	Threaded	Integral	✓	✓	✓	✓	✓	✓	✓
<hr/>									
STOPPING PLUGS <i>(Dome Head Dual Metallic and Glass Filled Nylon)</i>									
PD-U	Clearance	Integral	✓	✓	✓	✓	✓	✓	✓
PD-E-4	Threaded	Integral	✓	✓	✓	✓	✓	✓	✓
<hr/>									
BREATHER DRAIN <i>(Increased Safety Metallic and Glass Filled Nylon)</i>									
DP-E	Clearance	Integral	✓	✓	✗	✗	✓	✓	✗
DP-E-4	Threaded	Integral	✓	✓	✗	✗	✓	✓	✗
<hr/>									
Redapt products supplied without Integral Sealing									
STOPPING PLUGS <i>(Type A & Type B Metallic)</i>									
PA-D	Threaded	Thread Sealant	✓	✓	✓	✓	✓	✓	✓
PB-D	Threaded	None	✓	✗	✗	✗	✓	✗	✗
<hr/>									
OTHER PRODUCTS <i>(Insulated & 90° Adaptors)</i>									
AI-D	Clearance	IP Washer	✓	✓	✓	✓	✓	✓	✓
AR-D	Clearance	None	✓	✗	✗	✗	✓	✗	✗
	Threaded	Thread Sealant	✓	✓	✓	✓	✓	✓	✓
	Threaded	IP Washer	✓	✓	✓	✓	✓	✓	✓
	Threaded	None	✓	✗	✗	✗	✓	✗	✗