



# **LEAD-FREE RAUTITAN**

## Plumbing system for safer drinking water

Water is the most precious element to human life; an essential nutrient for our health and well-being. Everybody has the right to clean water and this is what drives REHAU's commitment to create innovative and sustainable plumbing systems that deliver safe, clean drinking water to the community. In Australia, the availability of clean, fresh drinking water is generally taken for granted. Although, for a number of years now, there has been a growing concern regarding the purity of our drinking water due to reports of compromised water quality in some buildings. Recent recordings of elevated lead level in drinking water from Australian taps has resulted in more serious discussions regarding the importance of tighter regulations on plumbing materials and design.

The current Australian standard stipulates a maximum lead content of all wetted brass components to be 4.5% however, this is rarely checked or enforced. While it is unlikely for these trace levels of lead to leach into the water source, in some extreme environments or water types this can occur. Studies have shown that in some regions in Australia, lead levels in water has been recorded to be well above the 10 micrograms per litre benchmark established by the Australian Drinking Water Guidelines. In Germany and the USA more stringent lead content regulations have been in place for many years to reduce the risk of lead contamination in drinking water, driving manufacturers to develop low lead or lead-free solutions. In the US, for example, lead concentration in DZR brass plumbing components is limited to 0.25%. While these strict controls are not yet in place in Australia the growing concern from consumers and authorities is pushing regulators to consider this.

Through REHAU's commitment to help people consume the cleanest and purest water possible, REHAU ANZ has introduced the first Lead-Free PE-X plumbing range to Australia and New Zealand. REHAU's Lead-Free RAUTITAN consists of our renowned premium quality, high flexibility PE-Xa PN20 pipe (zero lead) combined with PVDF PXsr (zero lead) polymer fittings, Dezincification-resistant Gunmetal (RX+) fittings which contain <0.1% lead and PX polymer sleeves (zero lead) to create the cleanest and safest plumbing system on the planet.

As per the Safe Drinking Water Act (SDWA) established by the federal law in the US, Section 1417 defines the term "lead-free" as a material with a weighted average of 0.25% lead or less calculated across the wetted surfaces of a pipe, pipe fitting, plumbing fitting and fixture. This is a US Standard and is used in the absence of an Australian Standard covering the topic.

#### PE-Xa RAUTITAN Pipe

With 50 years of experience in PE-Xa pipe production REHAU has perfected the process of creating the highest quality pipe with the ideal properties for plumbing applications.

PE-Xa pipe naturally contains zero lead and has been specifically treated to ensure optimal flexibility, toughness and cleanliness to deliver pure, taste and odour-free water to the end user. Available in sizes from 16mm to 63mm for various applications including domestic hot and cold water, rainwater, recycled water and hydronic heating, REHAU's PE-Xa piping system is the ultimate choice for hygiene and sustainability.

#### PVDF PXsr Polymer Fittings

PXsr solvent resistant fittings are made from PVDF material, which contains zero lead and is supremely hygienic. Available in non-threaded fittings in sizes 16-20mm, PXsr fittings are 5 times lighter than brass meaning you can carry more and get the job done faster. They are corrosion proof and contain zero lead so they do not deteriorate over time, suffer oxide build-up or leach lead into the water making them safer for the community. PVDF is the same material as the PX sleeve and has proven over many years of incident-free operations to be highly resistant to environmental stress cracking when in contact with solvents commonly used on building sites, providing greater peace-of-mind for the plumber.

#### **Gunmetal RX+ Fittings**

RX+ fittings are made of a high quality lead-free bronze, also known as Red Brass or dezincification-resistant Gunmetal. They have a maximum lead content of 0.1%, exceeding the most stringent international standard for lead-free drinking water systems.

#### Ecobrass (EX+) Low Lead Fittings

EX+ fittings are made of DZR brass material, which has reduced levels of lead to below 0.09%. This is well below the maximum lead levels stipulated by international low-lead requirements in Europe and the US.

#### **PX Polymer Sleeves**

While compression sleeves are never in contact with water and therefore not covered by international lead-free regulation PVDF PX sleeves contain zero lead. They are available in sizes 16 to 40mm for use with REHAU water, gas and heating piping systems. They are lightweight, faster to install and completely secure making them the ideal material for compression sleeve jointed applications.

#### U-bend Fittings

Stagnant water in pipes (dead-legs) is known to facilitate the reproduction of bacteria and Legionella growth, which can cause health problems, commonly known as Legionnaires' disease. While guidelines exist in the Australian Plumbing Code to help minimise the risks, it can often be quite difficult to design a system that eliminates dead legs. REHAU's dezincification-resistant Gunmetal U-bend fittings are a unique concept purposely made to tackle this problem; minimizing dead-legs and allowing water to flow through plumbing fixtures even if they are not being used frequently. The U-bends reduce the risk of legionella growth facilitating the delivery of safer and cleaner water for the community.

With Lead-Free PE-X piping system now available in Australia and New Zealand the question arises, status quo or Lead-Free RAUTITAN? The choice is yours.



# **Pipes**

Lead-Free RAUTITAN is suitable for Platinum and Red RAUTITAN pipe in sizes 16-25mm

## RAUTITAN platinum for drinking water

REECE Code	Size	m/Coil	m/Length	Package (m) Coil	Package (m) Length
1450634	16 x 2.2	-	5	-	100
1450636	20 x 2.8	-	5	-	100
1450638	25 x 3.5	-	5	-	25
1450635	16 x 2.2	100	-	100	-
1450637	20 x 2.8	100	-	100	-
1450656	25 x 3.5	50	-	50	-
	1450634 1450636 1450638 1450635 1450637	1450634 16 x 2.2   1450636 20 x 2.8   1450638 25 x 3.5   1450635 16 x 2.2   1450637 20 x 2.8	1450634 16 x 2.2 -   1450636 20 x 2.8 -   1450638 25 x 3.5 -   1450635 16 x 2.2 100   1450637 20 x 2.8 100	1450634 16 x 2.2 - 5   1450636 20 x 2.8 - 5   1450638 25 x 3.5 - 5   1450635 16 x 2.2 100 -   1450637 20 x 2.8 100 -	REECE Code     Size     m/Coil     m/Length     Coil       1450634     16 x 2.2     -     5     -       1450636     20 x 2.8     -     5     -       1450638     25 x 3.5     -     5     -       1450635     16 x 2.2     100     -     100       1450637     20 x 2.8     100     -     100



#### **RAUTITAN** red for hot drinking water

REHAU Article	REECE Code	Size	m/Coil	m/Length	Package (m) Coil	Package (m) Length
132520-005	1450651	16 x 2.2	-	5	-	100
132530-005	1450653	20 x 2.8	-	5	-	100
132540-005	1450655	25 x 3.5	-	5	-	25
132520-100	1450650	16 x 2.2	100	-	100	-
132530-100	1450652	20 x 2.8	100	-	100	-
132540-050	1450654	25 x 3.5	50	-	50	-





## **Sleeves**

#### **PVDF PX Sleeves**

PX sleeves are made of solvent resistant PVDF material

#### **RAUTITAN PX compression sleeve**

REHAU Article	REECE Code	Size (mm)	Material	Package (pcs)
160001	1450510	16	PVDF	150
160002	1450511	20	PVDF	100
160003	1450512	25	PVDF	100



# **Fittings**

#### Non-threaded fittings

Non-threaded fittings are compression sleeve fittings that join PE-Xa pipes. Lead-Free RAUTITAN non-threaded fittings are made from either PVDF (PXsr) or Gunmetal (RX+) material.

#### **LEAD-FREE no.1 straight coupling**

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326505-001	750520	16 - 16	PVDF	1
326506-001	750521	20 - 20	PVDF	1
456441-001	1451170	25 - 25	Gunmetal	10



#### **LEAD-FREE no.1 R reducing coupling**

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326514-001	750526	20 - 16	PVDF	1
456445-001	1451154	25 - 16	Gunmetal	10
456446-001	1451155	25 - 20	Gunmetal	10





### LEAD-FREE no.12 elbow 90°

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326508-001	750522	16	PVDF	1
326509-001	750523	20	PVDF	1
456431-001	1451147	25	Gunmetal	10







## LEAD-FREE no.24 T-piece

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326511-001	750524	16 - 16 - 16	PVDF	10
326512-001	750525	20 - 20 - 20	PVDF	10
456452-001	1451178	25 - 25 - 25	Gunmetal	10



## **LEAD-FREE** no.25 T-piece - reduced centre

Reece Code	Size (mm)	Material	Package (pcs)
750527	20 - 16 - 20	PVDF	1
1451184	25 - 16 - 25	Gunmetal	10
1451185	25 - 20 - 25	Gunmetal	10
	750527 1451184	750527 20 - 16 - 20 1451184 25 - 16 - 25	750527 20 - 16 - 20 PVDF 1451184 25 - 16 - 25 Gunmetal



## LEAD-FREE no.26 T-piece - reduced end

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326520-001	750528	20 - 20 - 16	PVDF	1
326522-001	750529	20 - 16 - 16	PVDF	1



## **LEAD-FREE no.28 T-piece - reduced ends**

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
326526-001	750530	16 - 20 - 16	PVDF	1



## LEAD-FREE no.61 stopper

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456387-001	1451156	16	Gunmetal	10
456388-001	1451157	20	Gunmetal	10





#### **Threaded fittings**

Threaded fittings are metallic fittings with a thread on them that allows connection with third party components or appliances. Lead-Free RAUTITAN threaded fittings are made from Gunmetal (RX+) material.

#### LEAD-FREE no.2 straight connector - female

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456327-001	1451158	16 - Rp 1/2"	Gunmetal	10
456328-001	1451159	20 - Rp 1/2"	Gunmetal	10
456329-001	1451160	20 - Rp 3/4"	Gunmetal	10
456331-001	1451162	25 - Rp 3/4"	Gunmetal	10
456408-001	1451161	25 - Rp 1"	Gunmetal	5



#### LEAD-FREE no.3 straight connector - male

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456311-001	1451163	16 - R 1/2"	Gunmetal	10
456312-001	1451164	16 - R 3/4"	Gunmetal	10
456314-001	1451166	20 - R 1/2"	Gunmetal	10
456315-001	1451167	20 - R 3/4"	Gunmetal	10
456316-001	1451165	20 - R 1"	Gunmetal	5
456318-001	1451169	25 - R 3/4"	Gunmetal	10
456319-001	1451168	25 - R 1"	Gunmetal	10



#### LEAD-FREE no.62 straight tap connector with gasket - female

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456335-001	1451171	16 - G 1/2"	Gunmetal	10
456337-001	1451172	20 - G 1/2"	Gunmetal	10
456338-001	1451173	20 - G 3/4"	Gunmetal	10
456339-001	1451175	25 - G 3/4"	Gunmetal	10
456340-001	1451174	25 - G 1"	Gunmetal	10



#### LEAD-FREE no.63 bent tap connector with gasket - female

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456396-001	1451176	16 - G 1/2"	Gunmetal	10
456413-001	1451177	20 - G 1/2"	Gunmetal	10





<sup>&</sup>quot;R" = tapered male thread

<sup>&</sup>quot;Rp" = female thread

<sup>&</sup>quot;G" = parallel male thread

## LEAD-FREE no.15 bp elbow - female thread - with 2 lugs

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456358-001	1451148	16 - Rp 1/2"	Gunmetal	10
456359-001	1451149	20 - Rp 1/2"	Gunmetal	10
456360-001	1451150	20 - Rp 3/4"	Gunmetal	10
456361-001	1451151	25 - Rp 3/4"	Gunmetal	10



## LEAD-FREE No.15 BP elbow female - 4 lugs section

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456367-001	1451152	16 - Rp 1/2"	Gunmetal	10
456369-001	1451153	20 - Rp 1/2"	Gunmetal	10



#### LEAD-FREE no.13 elbow - male thread

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456347-001	1451143	16 - R 1/2"	Gunmetal	10
456348-001	1451144	20 - R 1/2"	Gunmetal	10
456349-001	1451145	20 - R 3/4"	Gunmetal	10
456350-001	1451146	25 - R 3/4"	Gunmetal	10



#### LEAD-FREE no.14 elbow - female thread

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456353-001	1451140	16 - Rp 1/2"	Gunmetal	10
456355-001	1451141	20 - Rp 1/2"	Gunmetal	10
456356-001	1451142	20 - Rp 3/4"	Gunmetal	10



## **LEAD-FREE** connection T-piece - male thread

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456400-001	1451137	16 - 16 - R 1/2"	Gunmetal	4
456401-001	1451138	20 - 20 - R 1/2"	Gunmetal	4
456402-001	1451139	20 - 20 - R 3/4"	Gunmetal	4





## **LEAD-FREE** connection T-piece - female thread with lugs

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456291-001	1451181	16 - Rp 1/2" - 16	Gunmetal	10
456293-001	1451182	20 - Rp 1/2" - 16	Gunmetal	10
456294-001	1451183	20 - Rp 1/2" - 20	Gunmetal	10



## **LEAD-FREE** connection T-piece - female thread

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456414-001	1451179	25 - Rp 1/2" - 25	Gunmetal	10
456296-001	1451180	25 - Rp 3/4" - 25	Gunmetal	10
456297-001	1451192	32 - Rp 3/4" - 32	Gunmetal	3
456298-001	1451190	32 - Rp 3/4" - 25	Gunmetal	3
456299-001	1451193	32 - Rp 1" - 32	Gunmetal	3
456300-001	1451191	40 - Rp 1" - 40	Gunmetal	1



## **LEAD-FREE U-bend long - female thread 56mm**

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
456270-001	1451198	16/16 - Rp 1/2"	Gunmetal	5
456271-001	1451199	20/20 - Rp 1/2"	Gunmetal	5



#### LEAD-FREE No.19 BP Elbow - male thread

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
430784-001	1451135	16- G1/2"B MI ext.90mm	Ecobrass	15
430786-001	1451136	20- G1/2"B MI ext.95mm	Ecobrass	15



### LEAD-FREE Double Elbow 90 degree

REHAU Article	Reece Code	Size (mm)	Material	Package (pcs)
430783-001	1451196	16-G1/2"B-16	Ecobrass	5
430778-001	1451197	20-G1/2"B-20	Ecobrass	5





# Notes

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