

**High Performance**  
**Colour Identifiable**  
**Polymer Pipe System**

# The Importance of Colour Identification

Current building codes of practice dictate that all pipework within commercial and industrial facilities be labelled or painted to readily identify the type of contents.

## PRO-PIPE II®

Is the simplest method of complying with current building codes, requiring no additional costs or work and will fully comply with Australian Standards AS 1345 - 1995

### Why Colour Identification?

- ✓ To readily allow emergency services to take the appropriate action when the situation arises, eg.. in cases of fire they can quickly isolate a pipeline that contains hazardous material such as oil, solvents or chemicals.
- ✓ To reduce the incidence of incorrectly connecting or dis-connecting ancillary equipment to the wrong pipe.
- ✓ To save time and money by allowing service personnel to immediately identify the pipe contents without having to trace the pipe back to source.



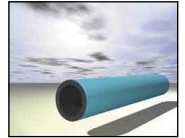
# Why Pro Pipe II® ?

**PRO-PIPE II®** is a major advancement in pipe systems with all major components as part of an integrated system supplied by Calair Pipe Systems.

Using leading edge technology during design and manufacture has provided the opportunity to use the latest polymers in developing a modular pressure pipe system with exceptional performance levels.

PRO-PIPE II® pipe is manufactured from a CXPP40 Co-Polymer Polypropylene and the fittings from XXHP40 a Homo-Polymer Polypropylene, with both these materials coming from the same polymer family it eliminates mismatching when used in chemical applications.

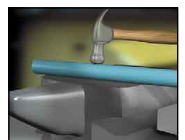
The colour in PRO-PIPE II® is co-extruded and applied as a homogeneous melt within the die-head, resulting in a coloured layer that will not peel, flake, de-laminate or crack, even when exposed to U.V. light. This feature provides major cost savings through the elimination of periodic maintenance such as painting or labelling.



**Improved U.V. Stability**



**High Temp Rating**



**High Impact Resistance**



**High Chemical Resistance**



**Increased Rigidity**

## 5 Major Advantages of Pro Pipe II®

- ✓ Is the easiest method of reticulation available today. A system requiring no gluing, threading, welding, soldering or brazing that will provide first class results even from inexperienced personnel.
- ✓ Has a wide operating temperature\* range of -20°C and +100°C, to allow use in diverse applications such as brine (-20°C) or Hot water (+80°C) It is also more tolerant of hot air in compressed air applications.
- ✓ Is manufactured from "Food Grade" materials making it acceptable for "Breathing Air".
- ✓ Is environmentally friendly, as all materials are Re-Usable, Re-Locatable and Re-Cycleable.
- ✓ Cannot rust which eliminates contamination of expensive equipment, can be installed in damp or wet conditions and can be buried in both soil or concrete without corrosion.

\* When used at temperatures between +10°C and -20°C, PRO-PIPE II will have reduced impact resistance. Please contact us before purchasing PRO-PIPE II for applications in this temperature range as we will need to discuss with you the suitability of PRO-PIPE II for your requirements.

# Calair Pipe System is more **cost effective**

Calair Pipe Systems - Australian designed and developed, were first introduced into the Australian market in 1989, and through a process of continuous improvement and development has resulted in producing the best performing and most cost effective systems available.

Calair customers benefit from over 15yrs of reticulation experience combined with the most innovative technologies ensuring that every application is met efficiently.

## **CalAir is the proven system**

CalAir Pipe Systems have now been installed in every sector of commerce with the same high level of success.

CalAir Pipe Systems can be seen throughout Manufacturing Industries such as automotive, food, telecommunications, construction, plastic, printing, engineering, packaging, furniture, and woodworking. Service Industries such as garages, laboratories, mining and abattoirs also Government Institutions such as hospitals, council workshops, transport, defence establishments, universities and colleges. Users of CalAir Pipe Systems represent all sizes and facets of industry of which many have provided testimonials and are available through a user-list for reference.

## **CalAir provides all necessary materials.**

The concept of CalAir Pipe Systems is to provide all necessary materials from a single source, for the successful installation of a complete reticulation system. Traditional materials including accessories can be purchased from many different sources with no guarantee of suitability or performance to dissimilar components.

### **CALAIR CUSTOMERS**

3M

A.T.&T.

ABB Fans

BTR Engineering

BHP

Coca Cola

Dayco Mark IV

Elf Atochem

Fuji Xerox

Ford

McCain Foods

Nestle

Sew Eurodrive

Southcorp Wines

Telstra

Toyo Tyres

Toyota Motor Co.



# The benefits of an **efficient system**

## **ENERGY SAVINGS**

Pro Pipe II® System provides the highest level of sealing efficiency. Reduced cycle time of compressors, pumps and ancillary equipment eliminates product loss and provides energy cost savings.



## **LABOUR SAVINGS**

Pro Pipe II® System is 3-4 times quicker to install than traditional materials with modifications and changes undertaken in minutes.



## **MAINTENANCE SAVINGS**

Requires no periodical painting or labelling.



## **UPGRADE SAVINGS**

Re-Locatable, Re-Useable and 100%  
Re-cycleable

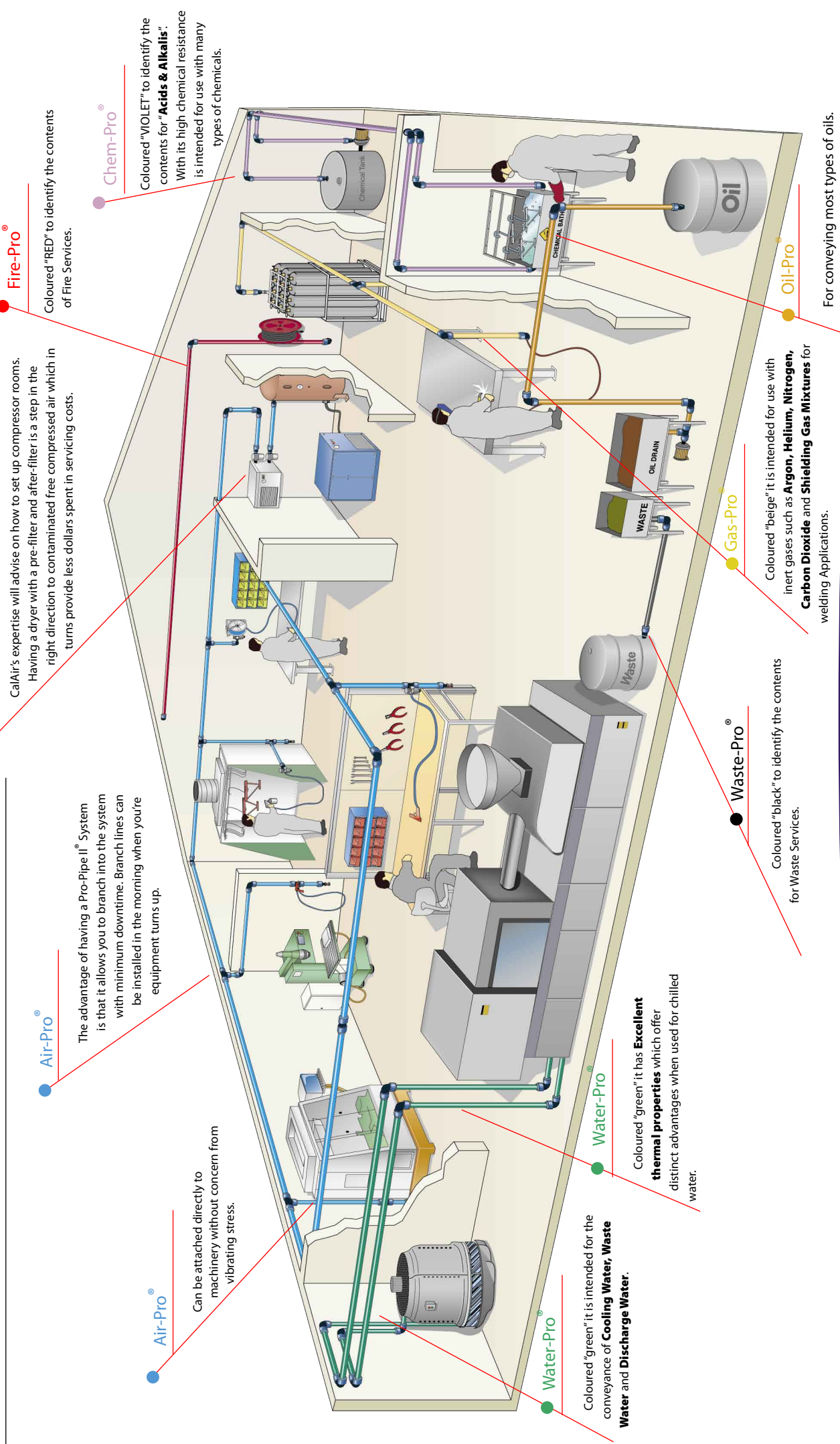


## **MATERIAL COST SAVINGS**

Manufactured to be high performance  
low cost



# Typical Factory Layout



**Fire-Pro**

Coloured "RED" to identify the contents of Fire Services.

**Chem-Pro**

Coloured "VIOLET" to identify the contents for "Acids & Alkalis". With its high chemical resistance is intended for use with many types of chemicals.

**Air-Pro**

CalAir's expertise will advise on how to set up compressor rooms. Having a dryer with a pre-filter and after-filter is a step in the right direction to contaminated free compressed air which in turns provide less dollars spent in servicing costs.

**Air-Pro**

The advantage of having a Pro-Pipe II® System is that it allows you to branch into the system with minimum downtime. Branch lines can be installed in the morning when you're equipment turns up.

**Air-Pro**

Can be attached directly to machinery without concern from vibrating stress.

**Water-Pro**

Coloured "green" it is intended for the conveyance of **Cooling Water, Waste Water and Discharge Water.**

**Water-Pro**

Coloured "green" it has **Excellent thermal properties** which offer distinct advantages when used for chilled water.

**Waste-Pro**

Coloured "black" to identify the contents for Waste Services.

**Gas-Pro**

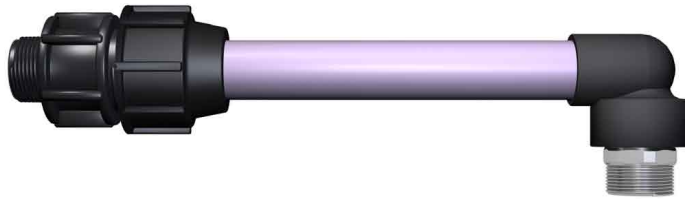
Coloured "beige" it is intended for use with inert gases such as **Argon, Helium, Nitrogen, Carbon Dioxide** and **Shielding Gas Mixtures** for welding Applications.

**Oil-Pro**

For conveying most types of oils.

# Joining System

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## Compression Fittings

The Pro-Pipe II compression range can be used to extend existing pipe work of steel or copper and to connect to ancillary equipment such as filters/regulators and quick connectors. These items can simply be screwed into the relevant fitting which is threaded BSP. An airtight seal is provided by an 'O'-Ring within the fitting which is maintained even in deflected angles of up to 30 deg. Pullout is prevented by a grip-ring which bites into the pipe.

The use of **Calair Support Clips** are highly recommended as they will considerably speed up installation and provide a positive method of location, they will also assist in the removal of pipe for modification.

No expensive skilled labour is needed for installation, reconfiguring or recycling of the Pro-Pipe II compression range - just simple ring wrenches, used by normal factory labour after minutes of training. They can be quickly and easily demounted for changes to reticulation systems as plant needs change.



## Socket Fusion

The Pro-Pipe II socket fusion range features the same clean, low-friction and non-corrosive qualities of the compression fittings range, which are valued in a huge number of applications because they are far easier and faster to erect than alternative systems. The socket fusion range of fittings are offered as a low-cost permanent alternative to the standard range of compression fittings.

The socket fusion joint system is assembled using electric socket fusion welders.

The standard socket fusion threaded joints are made from Nickel plated Brass however for chemically aggressive environments we can offer these fittings made from **316 Stainless Steel**



Our socket fusion products which complements our internationally successful compression fitting systems - is designed to provide another dimension to the CalAir product range. This will enable users to select the ideal CalAir joining system most suited and most cost-effective for their ongoing needs.

# Developing innovative customised solutions for specific applications

Calair Pipe Systems have the skills and experience in bringing new ideas to the market place.

At Calair we can develop application specific programs that will help to make your processes more efficient and cost effective. with the end result of producing a system that will achieve optimum results

## Accommodation of thermal expansion

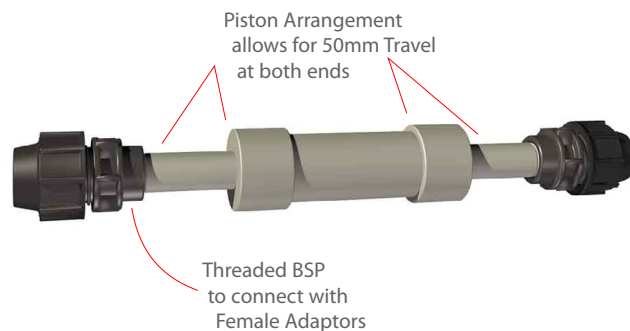
The PRO-PIPE II® system offers an expansion coupling capable of accommodating up to 100mm (4") of lateral movement.

The design and development of the expansion coupling was carried out in-house by Calair's own R&D department.

The innovative design uses a double piston arrangement incorporating a labyrinth seal and equalising chambers that contain pressure whilst allowing up to 50mm (2") per end of travel.

The exposed piston ends are threaded BSP for threading to a Female Adaptor.

### Expansion Coupling



## Solutions Guaranteed

Calair Pipe Systems' authorised installer will provide a written 10 year guarantee covering materials and workmanship on installations by an authorised installer subject to operating conditions. Proof that no other system can compete on outright performance and value for money.



10 Yr Guarantee with every installed system subject to operating conditions

solution orientated  
new technologies

# Testimonials

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Among the factors that attracted us to Pro-Pipe II® was the fact that it wouldn't rust and that it can be quickly reconfigured in service. Working in a chemical cleaning environment, reliability, safety and efficiency are paramount  
"Since it has gone in, it has also been very tight and leak free. With the compressed air lines, I was surprised how quiet it was, because of the lack of leakage.

Mr Jim Clements., Capral Aluminium

We like the flexibility and we like the fact that the polymer system can be rapidly reconfigured without having to call in the specialised labour needed to cut down and reconstruct metal reticulation systems – often at considerable expense and with considerable time losses.

Steven van Winckel, HSV Production Engineer



Rather than needing skilled labour to integrate expensive and time-consuming alterations, the Pro-Pipe II® system can be quickly and conveniently changed. There has been no problem with it at all. We haven't had to touch it in the four years that it has been installed

Robert Marchese, Rosemount Estate Wines

We wanted easy installation, with no threading or brazing required. We also wanted the ability to very easily cut into and reconfigure the system at any point, which we have already done on numerous occasions since it was installed, CalAir was also able to offer us the desired level of product sturdiness, combined with ongoing service support.

Neil McKay Rib Loc Pipe Systems



## For up-to date news

Please visit our website [www.calair.net.au](http://www.calair.net.au) to view case studies, news and for recent product developments.





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