



**Polymer Door Frame**  
Fully maintenance-free  
in 5 year term ▶

**Metal Door Frame**  
Multiple re-paints needed  
in 5 year term ▶

**Polymer Door Frame (LEFT) vs Conventional Metal Door Frames (RIGHT) after 5 Years**

# Polymer Door Frames vs Metal Door Frames

**HEALTH FACILITIES**

**5 & 10 YEAR COST COMPARISONS**

One and five year trials of polymer door frames as an alternate to conventional metal door frames have been conducted in various health and aged care facilities in Queensland.

# CASE STUDY 1 : 5 YEAR TRIAL (MAINTENANCE COSTS - HEALTH FACILITY)

**Photo 1.1 depicts the results of a 5 Year Trial in a health facility. Polymer door frames side-by-side with conventional metal door frames.**

The polymer frame to the left is untouched in five years and in good condition. The metal frame to the right has been painted regularly over same period.

## The Investigation

Metal door frames are damaged by carts, wheel chairs beds and trolleys.

Paint is 0.5 mm thick and offers little protection; a re-paint may last only a matter of days. No change is expected in the type of damage caused.

Golden Staph bacteria has been proven to live quite efficiently in enamel paint and even better under flaking paint.

## The Cost Implication

Health facilities are reporting 6 monthly repaints of door frames to be necessary, but rarely practical due to budgetary restraints. Average door frame painting cost is \$150 per frame in occupied areas.

If loss of room occupancy is required for painting, revenue loss is typically \$2500 per night plus the painting cost.

## The Solution

Armourline Polymer Door Frames are designed to be high impact resistant, easy clean, full thickness colour and will not harbour bacteria. They do not fade and never need painting. The issue is removed at low cost.

### ARMOURLINE POLYMER DOOR FRAME

(Costs are indicative only and represent product base model costs)

**Installed Cost.....\$550**

**Cost over 5 Years .....\$550**

- 1 Purchase
- No Paint
- No Loss of Room Rental



Photo 1.1

### CONVENTIONAL METAL DOOR FRAME

(Costs are indicative only and represent product base model costs)

**Installed Cost.....\$461**

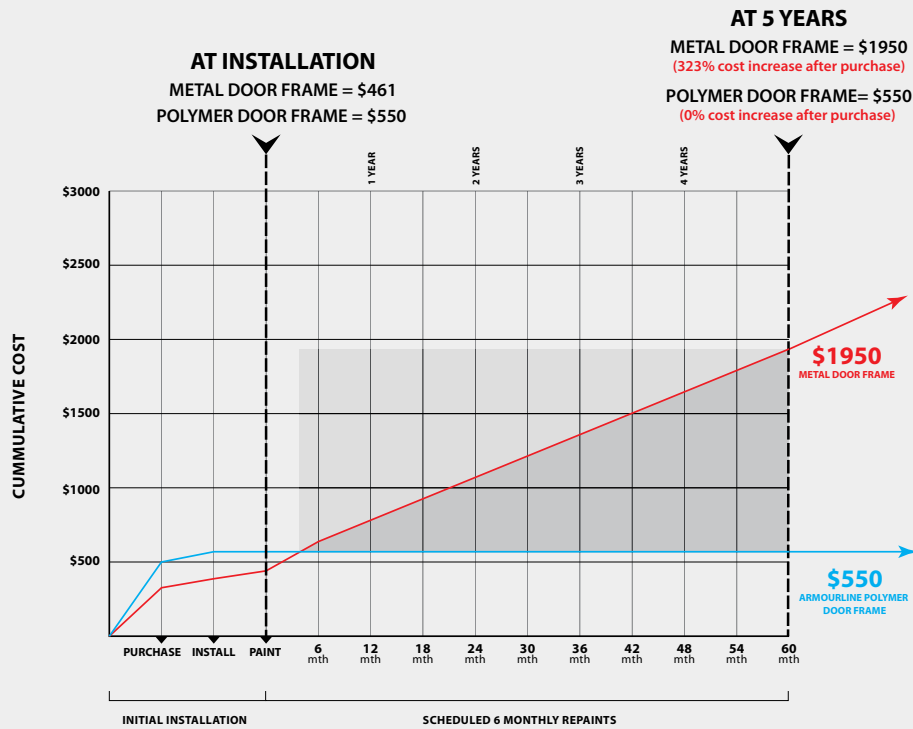
**Cost over 5 Years .....\$26,960**

- 1 Purchase
- 11 x Paint Jobs
- 10 x Loss of Room Rental

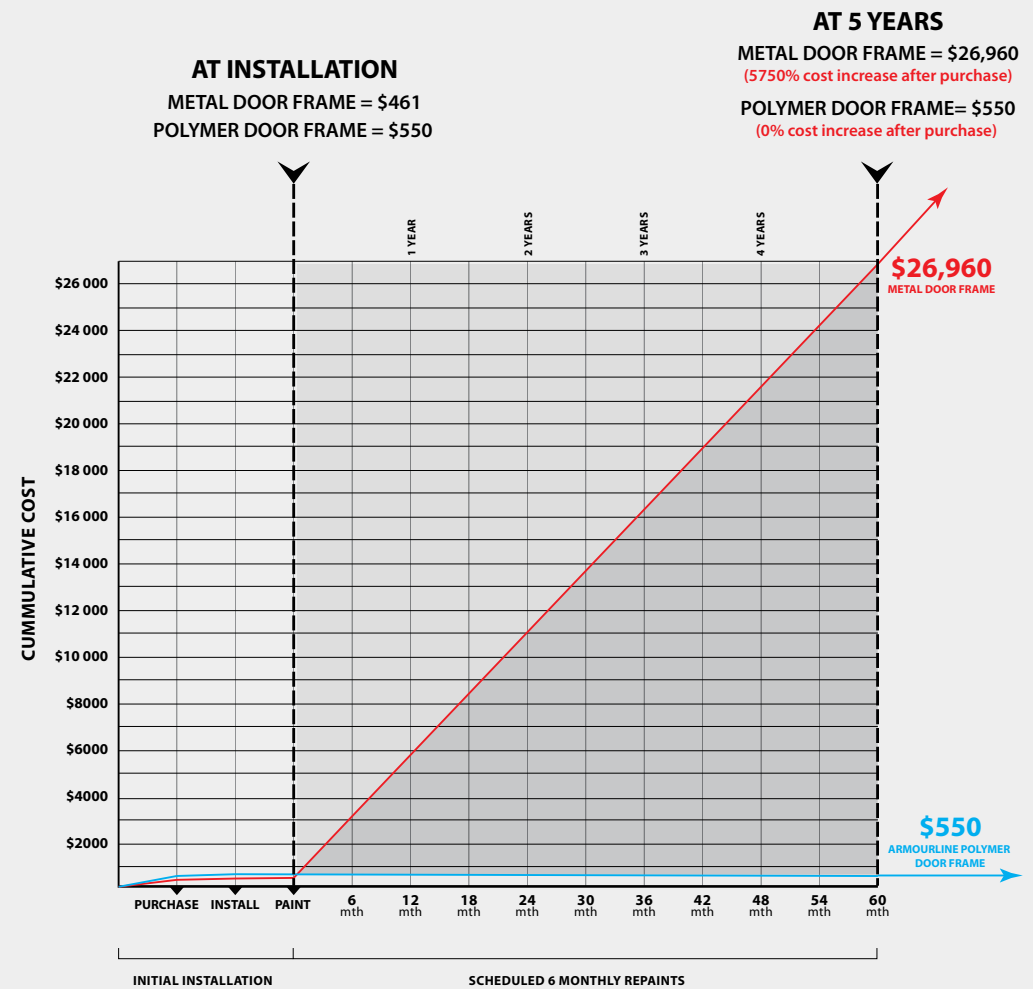
# CASE STUDY 1 : COST COMPARISONS (MAINTENANCE COSTS - HEALTH FACILITY)

## 5 YEAR TRIAL - POLYMER VS METAL, OCCUPIED & UNOCCUPIED ROOMS

**FIGURE 1.1** | 5 YEAR TRIAL : NON-OCCUPIED ROOM



**FIGURE 1.2** | 5 YEAR TRIAL : OCCUPIED ROOM



# CASE STUDY 2 : WATER DAMAGE (REFURBISHMENT COSTS - HEALTH FACILITY)



Photo 2.1

**Photo 2.1** depicts a metal door frame, silicon applied at the base is the attempt at preventing water entering the wall cavity.



Photo 2.2

**Photo 2.2** depicts what is happening inside the wall cavity. Rusted off studs and black mould are a common outcome.

## The Investigation

Metal door frames are installed in the stud frame prior to sheeting of walls. The waterproofing membrane cannot be installed behind the frame.

The floor is topped to gain fall to the floor waste, worsening the problem. The wall frame is now the lowest part of the room and the obvious place for water to migrate to.

Additional factors contribute to the issue; the bathrooms are small and no shower screens are possible, so the door frame is constantly wet.

## The Cost Implication

Health facilities are reporting bathroom life cycles to be as little as 10 years, costing \$20 000 to \$30 000 per re-fit, plus loss of room occupancy at \$2500 per night.

A bathroom refurbishment of ten days, represents a significant loss of revenue plus the refurbishment costs.

**An initial \$200 spend to upgrade to a Polymer Door Frame can result in savings of \$20,000 to \$30,000 over a 10 year period and potentially several times that amount if the room is occupied.**

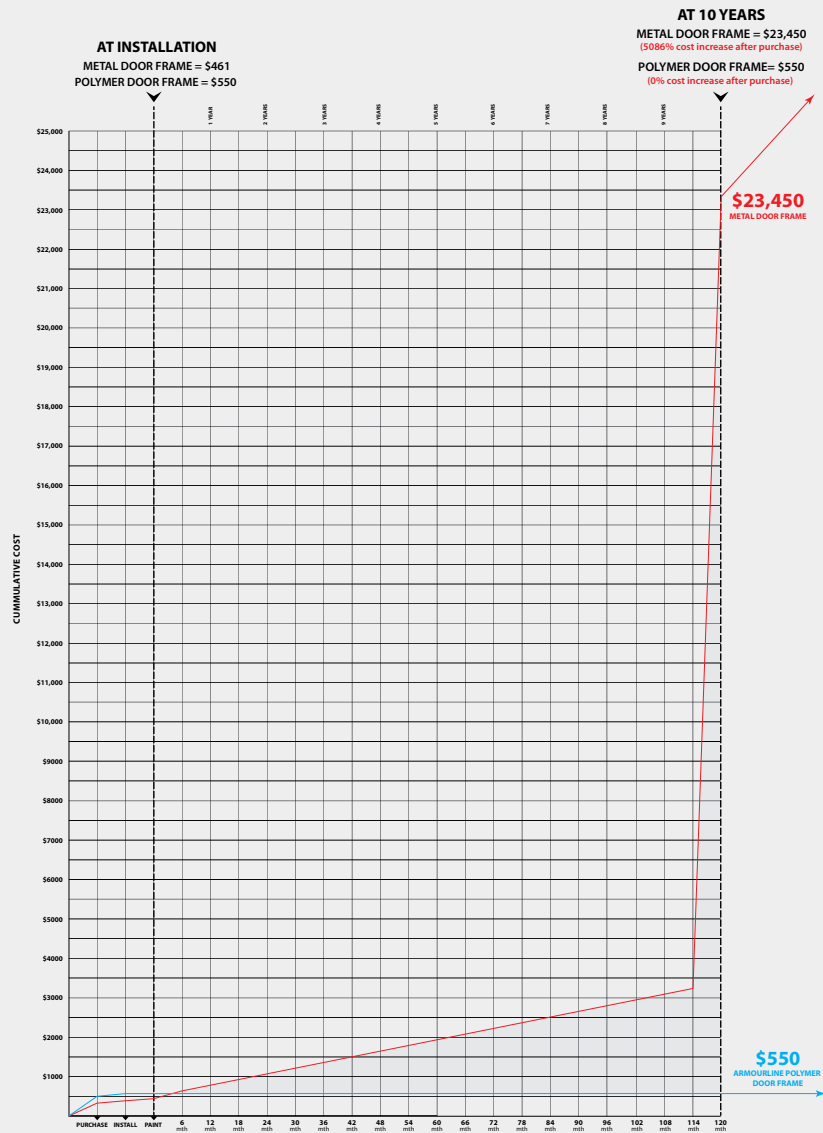
## The Solution

Armourline Polymer Door Frames have been designed to allow wet seal to be applied after sheeting of walls and before the door frame is fitted. Door frames no longer rust, allow no water into the wall cavity. They are impact resistant and do not require painting. The issue is removed at extremely low cost.

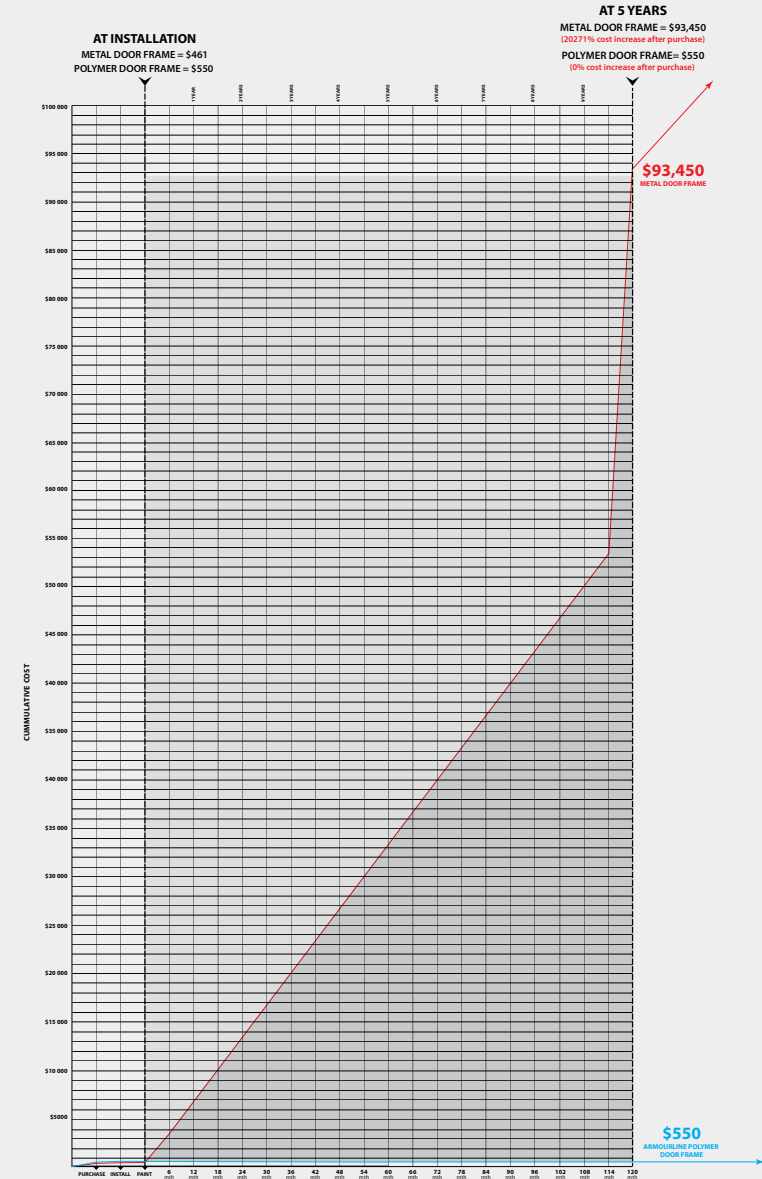
# CASE STUDY 2 : COST COMPARISON (REFURBISHMENT COSTS - HEALTH FACILITY)

## 10 YEAR OUTCOME - POLYMER VS METAL, OCCUPIED & UNOCCUPIED ROOMS

**FIGURE 2.1 | 10 YEAR OUTCOME : UNOCCUPIED ROOM**



**FIGURE 2.2 | 10 YEAR OUTCOME : OCCUPIED ROOM**



# ARMOURLINE POLYMER DOOR FRAMES - ADDITIONAL ADVANTAGES

**Armourline polymer door frames and wall protection have a broad range of qualities which make them the logical choice for health facilities.**

- ✓ Sizes made-to-order and freighted to sites daily
- ✓ High impact resistance without chipping or flaking
- ✓ Impervious to almost all chemicals, acids, cleaning agents and graffiti
- ✓ Unaffected by termite or fungal attack
- ✓ Completely impervious to long term water submersion
- ✓ Unaffected by high salt environments
- ✓ Easy clean over and over again
- ✓ Homogeneous material requires no painting
- ✓ UV stable, will not fade, discolour or become brittle or chalky Allows for wet seal on floors to be completed , then fitted afterwards without compromising the wet seal
- ✓ Rapid and easy installation without the need to disrupt plaster or paint
- ✓ Able to be in constant service at temperatures of up to 80°C and as low as to -40°C
- ✓ Manufactured from Food Grade HDPE polymer. Testing and approval by USA FDA as suitable for food packaging
- ✓ Environmentally sustainable, 100% recyclable and very low environmental impact
- ✓ Pre-fitted hinges and striker plate, ready for door hanging
- ✓ Australian Made, Australian Materials, Australian Owned
- ✓ Five Year Manufacturer's Replacement Warranty



**Armourline door frames are available in the following stock colours, however any colour can be provided for volume orders.**

*(Screen and print variations can affect accurate rendering of colour swatches. Contact Armourline for samples.)*



Dulux® Paving Stone

Dulux® Pipe Clay

Dulux® Vivid White

*Lasting Solutions for Age Old Problems*



Armourline is an innovative, family-owned business that has grown to be one of Australia's leading polymer specialists.

Australia's only manufacturer of Armourline Polymer Door Frames, purpose-built for harsh environments.

We have extensive expertise across multiple industries, but with a particular focus on health and aged care facilities.

We proudly serve a broad range of clients which includes:



**Construction Services**

**QLD** Pty Ltd

Armourline is a trading entity of Construction Services Qld Pty Ltd, a service provider to institutions and industry. QBSA 1153315

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