

ARDENT™

Technical Guide



Every Ardent pipe and fitting is rigorously tested and made of the purest materials available.

So when you ask for Ardent, you know you're getting high quality metal, made to last.

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Copper Fittings

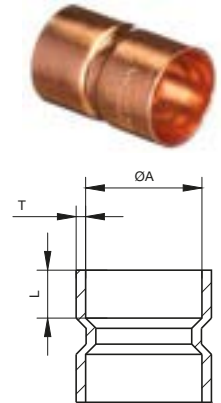
Copper Fittings

Ardent Copper Fittings

- The range of Ardent copper fittings are manufactured to comply and marked in accordance with Australian Standards AS1432 and AS3688.
- Premium quality range of fittings available, suitable for water and gas applications.
- Non-flammable and much safer as it will not burn or emit toxic fumes in the event of a fire.
- Ardent copper capillary fittings will work to the relevant safe working pressures and temperatures of copper tube marked AS1432 of equivalent nominal diameter.

Socket

| Code | Size | OA | L | T |
|---------|-------|--------|------|------|
| 9800095 | 15mm | 12.72 | 9 | 0.81 |
| 9800096 | 18mm | 15.9 | 11 | 0.91 |
| 9800097 | 20mm | 19.07 | 13.5 | 0.91 |
| 9800098 | 25mm | 25.42 | 7.5 | 1.09 |
| 9800099 | 32mm | 31.77 | 7.5 | 1.09 |
| 9800100 | 40mm | 38.12 | 7.5 | 1.09 |
| 9800101 | 50mm | 50.82 | 7.5 | 1.09 |
| 9800102 | 65mm | 63.55 | 7.5 | 1.09 |
| 9800103 | 80mm | 76.25 | 11.1 | 1.47 |
| 9800104 | 100mm | 101.65 | 11.1 | 1.47 |
| 9800105 | 125mm | 127.05 | 11.1 | 1.47 |
| 9800106 | 150mm | 152.45 | 20 | 1.47 |



Reducing Coupling

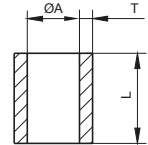
| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 |
|---------|-----------|-------|------|------|-------|------|------|
| 9800092 | 18 X 15mm | 15.88 | 11 | 0.91 | 12.72 | 9 | 0.81 |
| 9800093 | 20 X 15mm | 19.07 | 13.5 | 0.81 | 12.72 | 9 | 0.81 |
| 9800094 | 25 X 20mm | 25.42 | 17 | 1.09 | 19.07 | 13.5 | 0.91 |



Copper Fittings

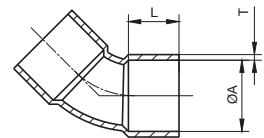
Slip Coupling

| Code | Size | OA | L | T |
|---------|------|-------|------|------|
| 9800148 | 15mm | 12.72 | 20 | 0.81 |
| 9800149 | 20mm | 19.07 | 29.5 | 0.91 |



45 Degree Bend

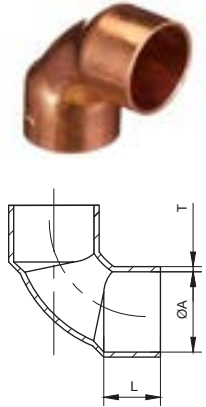
| Code | Size | OA | L | T |
|---------|-------|--------|------|------|
| 9800062 | 20mm | 19.07 | 13.5 | 0.91 |
| 9800063 | 25mm | 25.42 | 7.5 | 1.09 |
| 9800064 | 32mm | 31.77 | 7.5 | 1.09 |
| 9800065 | 40mm | 38.12 | 7.5 | 1.09 |
| 9800066 | 50mm | 50.82 | 7.5 | 1.09 |
| 9800067 | 65mm | 63.55 | 7.5 | 1.09 |
| 9800068 | 80mm | 76.25 | 11.1 | 1.47 |
| 9800069 | 100mm | 101.65 | 11.1 | 1.47 |
| 9800070 | 125mm | 127.05 | 11.1 | 1.47 |
| 9800151 | 150mm | 152.45 | 20 | 1.47 |
| 9800152 | 200mm | 203.25 | 20 | 1.47 |



Copper Fittings

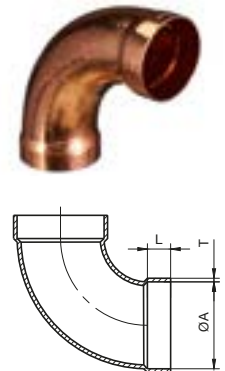
90 Degree Bend (Short Radius)

| Code | Size | OA | L | T |
|---------|-------|--------|------|------|
| 9800071 | 15mm | 12.72 | 9 | 0.81 |
| 9800073 | 20mm | 19.07 | 13.5 | 0.91 |
| 9800074 | 25mm | 25.42 | 7.5 | 1.09 |
| 9800075 | 32mm | 31.77 | 7.5 | 1.09 |
| 9800076 | 40mm | 38.12 | 7.5 | 1.09 |
| 9800077 | 50mm | 50.82 | 7.5 | 1.09 |
| 9800078 | 65mm | 63.55 | 7.5 | 1.09 |
| 9800079 | 80mm | 76.25 | 11.1 | 1.47 |
| 9800080 | 100mm | 101.65 | 11.1 | 1.47 |



90 Degree Bend (Long Radius)

| Code | Size | OA | L | T |
|---------|--------------------|--------|-----|------|
| 9800081 | 32mm | 31.77 | 8.5 | 1.09 |
| 9800082 | 40mm | 38.12 | 8.5 | 1.09 |
| 9800083 | 50mm | 50.82 | 8.5 | 1.09 |
| 9800084 | 65mm | 63.55 | 10 | 1.09 |
| 9800085 | 80mm | 76.25 | 13 | 1.47 |
| 9800086 | 100mm | 101.65 | 13 | 1.47 |
| 9800087 | 125mm | 127.05 | 20 | 1.47 |
| 9800088 | 150mm | 152.45 | 25 | 1.83 |
| 9800153 | 150mm (3/4 RAD) | 152.45 | 20 | 1.83 |
| 9800187 | 200mm | 203.25 | 20 | 1.83 |

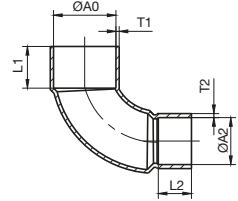


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Copper Fittings

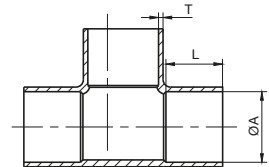
Reducing Elbow

| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 |
|---------|---------|-------|------|------|-------|------|------|
| 9800090 | 20X15mm | 19.07 | 13.5 | 0.91 | 12.72 | 9 | 0.81 |
| 9800091 | 25X20mm | 25.42 | 7.5 | 1.09 | 19.07 | 13.5 | 0.91 |



Tee

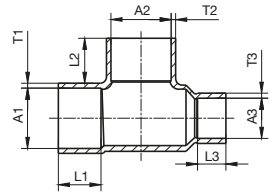
| Code | Size | OA | L | T |
|---------|-------|--------|------|------|
| 9800020 | 15mm | 12.72 | 9 | 0.81 |
| 9800022 | 20mm | 19.07 | 13.5 | 0.91 |
| 9800023 | 25mm | 25.42 | 7.5 | 1.09 |
| 9800024 | 32mm | 31.77 | 7.5 | 1.09 |
| 9800025 | 40mm | 38.12 | 7.5 | 1.09 |
| 9800026 | 50mm | 50.82 | 7.5 | 1.09 |
| 9800027 | 65mm | 63.55 | 7.5 | 1.09 |
| 9800028 | 80mm | 76.25 | 11.1 | 1.47 |
| 9800029 | 100mm | 101.65 | 11.1 | 1.47 |
| 9800030 | 125mm | 127.05 | 11.1 | 1.47 |
| 9800031 | 150mm | 152.45 | 14.2 | 1.83 |
| 9800032 | 200mm | 203.25 | 14.2 | 1.83 |



Copper Fittings

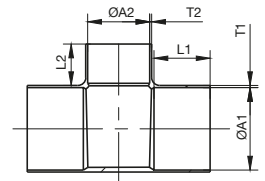
Reducing Tee (Side)

| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 | OA3 | L3 | T3 |
|---------|----------------|-------|------|------|-------|----|------|-------|------|------|
| 9800033 | 20 x 15 x 20mm | 19.07 | 13.5 | 0.91 | 12.72 | 9 | 0.81 | 19.07 | 13.5 | 0.91 |
| 9800034 | 25 x 20 x 25mm | 25.4 | 17 | 0.91 | 19.07 | 17 | 0.91 | 25.4 | 13.5 | 0.91 |



Reducing Tee (Centre)

| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 |
|---------|------------|--------|------|------|-------|------|------|
| 9800055 | 18 x 15mm | 15.9 | 11.1 | 0.81 | 12.72 | 9 | 0.81 |
| 9800056 | 20 x 15mm | 19.07 | 13.5 | 0.81 | 12.72 | 9 | 0.81 |
| 9800057 | 25 x 15mm | 25.4 | 7.5 | 1.09 | 12.72 | 9 | 0.81 |
| 9800058 | 25 x 20mm | 25.4 | 7.5 | 1.09 | 19.07 | 13.5 | 0.91 |
| 9800035 | 32 x 15mm | 31.77 | 7.5 | 1.09 | 12.72 | 9 | 0.81 |
| 9800036 | 32 x 20mm | 31.77 | 7.5 | 1.09 | 19.07 | 13.5 | 0.91 |
| 9800037 | 32 x 25mm | 31.77 | 7.5 | 1.09 | 25.42 | 7.5 | 1.09 |
| 9800038 | 40 x 20mm | 38.12 | 7.5 | 1.09 | 19.07 | 13.5 | 0.81 |
| 9800039 | 40 x 25mm | 38.12 | 7.5 | 1.09 | 25.4 | 7.5 | 1.09 |
| 9800040 | 40 x 32mm | 38.12 | 7.5 | 1.09 | 31.77 | 7.5 | 1.09 |
| 9800042 | 50 x 25mm | 50.82 | 7.5 | 1.09 | 25.4 | 7.5 | 1.09 |
| 9800043 | 50 x 32mm | 50.82 | 7.5 | 1.09 | 31.77 | 7.5 | 1.09 |
| 9800044 | 50 x 40mm | 50.82 | 7.5 | 1.09 | 38.12 | 7.5 | 1.09 |
| 9800045 | 65 x 40mm | 63.55 | 7.5 | 1.09 | 38.12 | 7.5 | 1.09 |
| 9800046 | 65 x 50mm | 63.55 | 7.5 | 1.09 | 50.82 | 7.5 | 1.09 |
| 9800047 | 80 x 50mm | 76.25 | 11.1 | 1.47 | 50.82 | 7.5 | 1.09 |
| 9800048 | 80 x 65mm | 76.25 | 11.1 | 1.47 | 63.55 | 7.5 | 1.09 |
| 9800049 | 100 x 50mm | 101.65 | 11.1 | 1.47 | 50.82 | 7.5 | 1.09 |
| 9800050 | 100 x 65mm | 101.65 | 11.1 | 1.47 | 63.55 | 7.5 | 1.09 |
| 9800051 | 100 x 80mm | 101.65 | 11.1 | 1.47 | 76.25 | 11.1 | 1.47 |

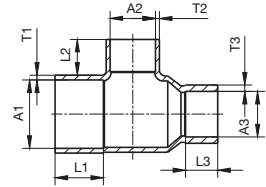


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Copper Fittings

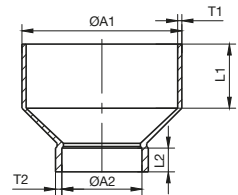
Reducing Tee (Side & Centre)

| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 | OA3 | L3 | T3 |
|---------|----------------|-------|------|------|-------|------|------|-------|------|------|
| 9800059 | 20 x 15 x 15mm | 19.07 | 13.5 | 0.91 | 12.72 | 9 | 0.81 | 12.72 | 9 | 0.81 |
| 9800060 | 25 x 20 x 20mm | 25.4 | 7.5 | 1.09 | 19.07 | 13.5 | 0.91 | 19.07 | 13.5 | 0.91 |



Concentric Reducer

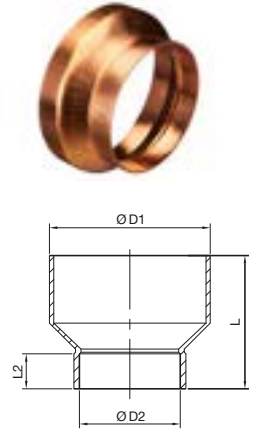
| Code | Size | OA1 | L1 | T1 | OA2 | L2 | T2 |
|---------|------------|-------|------|------|-------|------|------|
| 9800108 | 20 x 15mm | 19.05 | 13.5 | 0.81 | 12.72 | 9 | 0.81 |
| 9800109 | 25 x 15mm | 25.4 | 17 | 1.09 | 12.72 | 9 | 0.81 |
| 9800110 | 25 x 20mm | 25.4 | 17 | 1.09 | 19.07 | 13.5 | 0.91 |
| 9800111 | 32 x 15mm | 31.75 | 21 | 1.09 | 12.72 | 9 | 0.81 |
| 9800112 | 32 x 20mm | 31.75 | 21 | 1.09 | 19.07 | 13.5 | 0.91 |
| 9800113 | 32 x 25mm | 31.75 | 21 | 1.09 | 25.42 | 7.5 | 1.09 |
| 9800114 | 40 x 20mm | 38.1 | 25 | 1.09 | 19.07 | 13.5 | 0.81 |
| 9800115 | 40 x 25mm | 38.1 | 25 | 1.09 | 25.4 | 7.5 | 1.09 |
| 9800116 | 40 x 32mm | 38.1 | 25 | 1.09 | 31.77 | 7.5 | 1.09 |
| 9800117 | 50 x 20mm | 50.8 | 31 | 1.09 | 19.07 | 13.5 | 0.91 |
| 9800118 | 50 x 25mm | 50.8 | 31 | 1.09 | 25.4 | 7.5 | 1.09 |
| 9800119 | 50 x 32mm | 50.8 | 31 | 1.09 | 31.77 | 7.5 | 1.09 |
| 9800120 | 50 x 40mm | 50.8 | 31 | 1.09 | 38.12 | 7.5 | 1.09 |
| 9800178 | 65 x 32mm | 63.5 | 33 | 1.09 | 31.77 | 7.5 | 1.09 |
| 9800121 | 65 x 40mm | 63.5 | 33 | 1.09 | 38.12 | 7.5 | 1.09 |
| 9800122 | 65 x 50mm | 63.5 | 33 | 1.09 | 50.82 | 7.5 | 1.09 |
| 9800124 | 80 x 50mm | 76.2 | 48 | 1.47 | 50.82 | 7.5 | 1.09 |
| 9800125 | 80 x 65mm | 76.2 | 48 | 1.47 | 63.55 | 7.5 | 1.09 |
| 9800126 | 100 x 50mm | 101.6 | 57 | 1.47 | 50.82 | 7.5 | 1.09 |
| 9800127 | 100 x 65mm | 101.6 | 57 | 1.47 | 63.55 | 7.5 | 1.09 |
| 9800128 | 100 x 80mm | 101.6 | 57 | 1.47 | 76.25 | 11.1 | 1.47 |



Copper Fittings

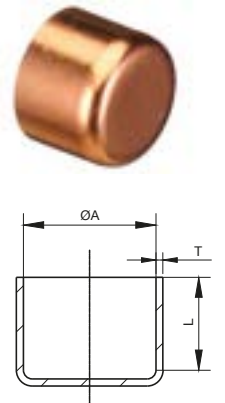
Concentric Reducer C/FAB

| Code | Size | D1 | D2 | L2 | L |
|---------|-------------|--------|--------|----|----|
| 9800179 | 150 x 100mm | 152.45 | 101.65 | 15 | 76 |
| 9800180 | 125 x 100mm | 127.05 | 101.65 | 15 | 71 |
| 9800181 | 100 x 65mm | 101.65 | 63.55 | 11 | 65 |
| 9800182 | 150 x 125mm | 152.45 | 127.05 | 15 | 63 |
| 9800183 | 125 x 80mm | 127.05 | 76.25 | 15 | 71 |
| 9800184 | 200 x 150mm | 203.25 | 152.45 | 20 | 88 |
| 9800185 | 150 x 80mm | 152.45 | 76.25 | 15 | 89 |
| 9800186 | 200 x 125mm | 203.25 | 127.05 | 15 | 96 |



Cap

| Code | Size | OA | L | T |
|---------|------|-------|------|------|
| 9800138 | 15mm | 12.72 | 9 | 0.81 |
| 9800139 | 20mm | 19.07 | 13.5 | 0.91 |
| 9800140 | 25mm | 25.42 | 7.5 | 1.09 |
| 9800143 | 50mm | 50.82 | 8.5 | 1.09 |



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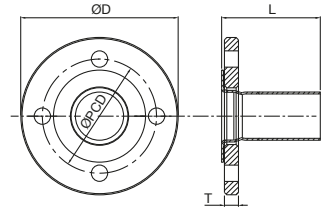
Copper Coated Flanges

Copper Coated Flanges

Ardent Press Flange Adaptors

The Ardent copper coated steel flange utilises the latest in copper coating technology to provide a flange with superior corrosion resistance:

- Copper coating suitable for all UV applications
- No insulator required - copper to copper contact
- Suitable for water, gas and all other HP copper applications
- Watermark Licence No.1344 to AS3688
- Working temperature of -10 to 110°C (Table E)
- Working temperature of -10 to 95°C (Table D)
- Patent pending - Design Registration No.342529



| Code | Flange | Size (DN) | Bolt Size | Bolt Holes | PCD (mm) | D (mm) | L (mm) | T(mm) |
|---------|---------|-----------|-----------|------------|----------|--------|--------|-------|
| 9504366 | Table E | 40 | M12 | 4 | 98 | 133 | 85 | 13 |
| 9504367 | Table E | 50 | M16 | 4 | 114 | 152 | 90 | 14 |
| 9504368 | Table E | 65 | M16 | 4 | 127 | 165 | 120 | 14 |
| 9504369 | Table E | 80 | M16 | 4 | 146 | 184 | 120 | 14 |
| 9504370 | Table E | 100 | M16 | 8 | 178 | 216 | 120 | 17.5 |

| | | | | | | | | |
|---------|---------|-----|-----|---|-----|-----|-----|------|
| 9504371 | Table D | 100 | M16 | 4 | 178 | 216 | 120 | 17.5 |
|---------|---------|-----|-----|---|-----|-----|-----|------|

Press Flange Adaptor Safe Working Pressure

| Code | SWP (kPa) |
|---------|-----------|
| 9504366 | 1400 |
| 9504367 | 1400 |
| 9504368 | 1400 |
| 9504369 | 1400 |
| 9504370 | 1400 |
| 9504371 | 700 |



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Assemblies and Breeches

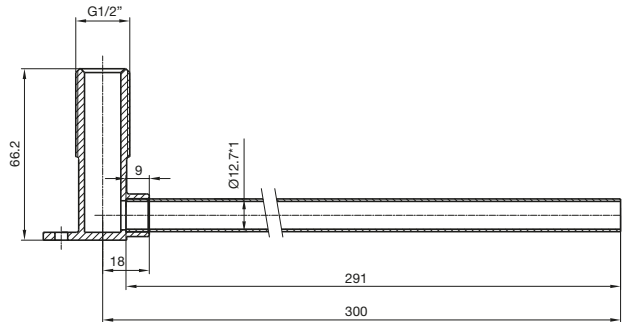
Assemblies and Breeches

Ardent Assemblies and Breeches

The Ardent range of assemblies and breeches have been manufactured in accordance with AS3718. The diverse Ardent range includes assemblies and breeches that satisfy applications including sinks, basins, showers and baths.

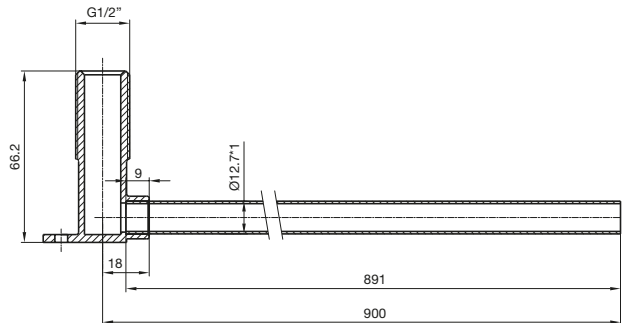
Ardent Screwed Outlet

| Code | Size |
|---------|-------|
| 9504600 | 300mm |



Ardent Screwed Outlet

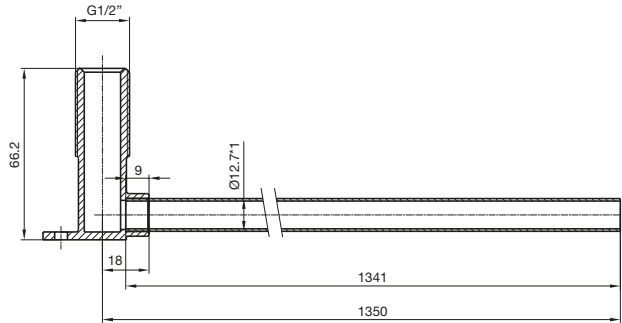
| Code | Size |
|---------|-------|
| 9504601 | 900mm |



Assemblies and Breeches

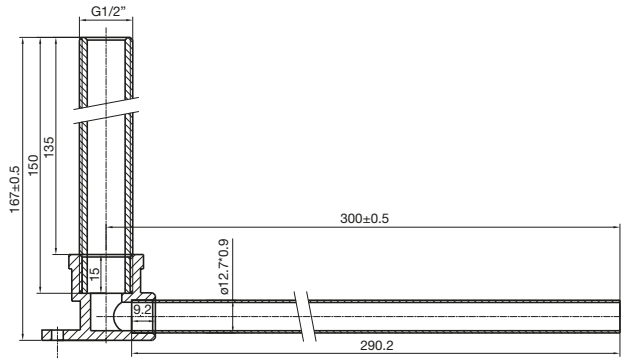
Ardent Screwed Outlet

| Code | Size |
|---------|--------|
| 9504602 | 1350mm |



Ardent Screwed Outlet

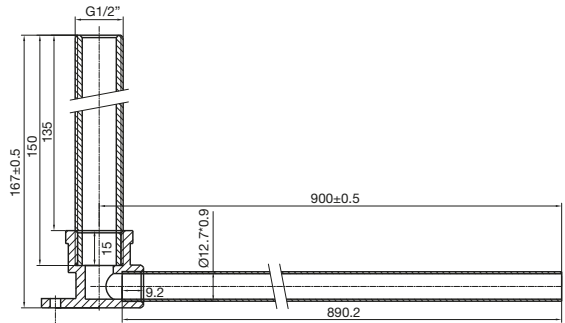
| Code | Size |
|---------|-------------------------|
| 9504606 | 300mm Tails |
| | 150mm Thread (15mm BSP) |



Assemblies and Breeches

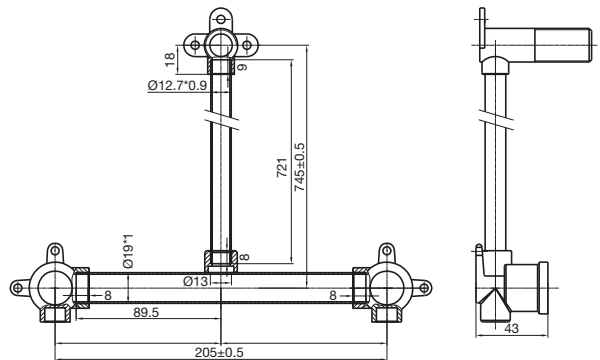
Ardent Screwed Outlet

| Code | Size |
|---------|-------------------------|
| 9504607 | 900 Tails |
| | 150mm Thread (15mm BSP) |



Ardent Shower Breech Bottom Entry

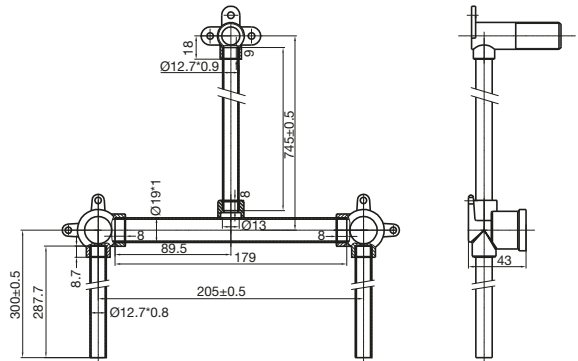
| Code | Size |
|---------|--------------|
| 9504614 | 200mm Centre |
| | NO TAILS |



Assemblies and Breeches

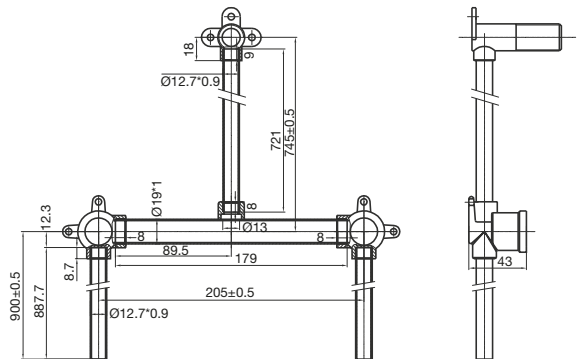
Ardent Shower Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504615 | 200mm Centre |
| | 300 Tails |



Ardent Shower Breech Bottom Entry

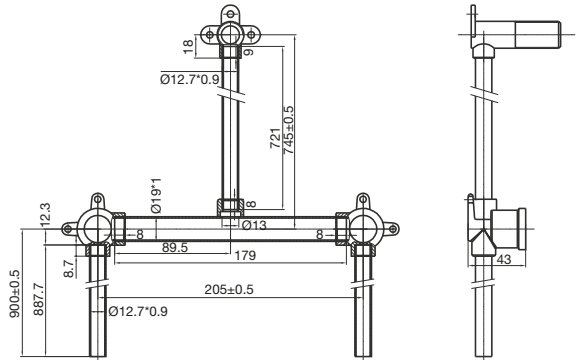
| Code | Size |
|---------|--------------|
| 9504616 | 200mm Centre |
| | 900 Tails |



Assemblies and Breeches

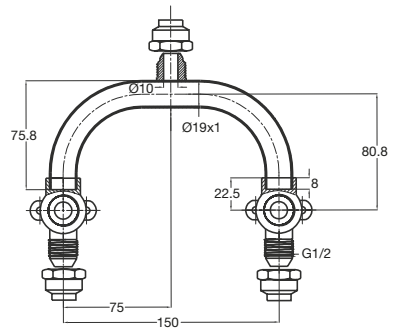
Ardent Shower Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504622 | 150mm Centre |
| | 150 Tails |



Ardent Shower Breech U-Type (Compression)

| Code | Size |
|---------|--------------|
| 9504625 | 150mm Centre |
| | NO TAILS |

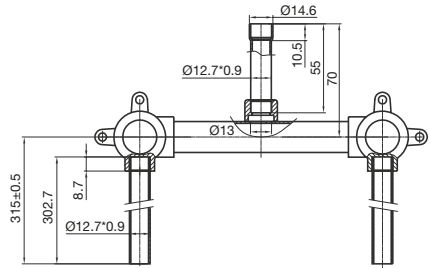
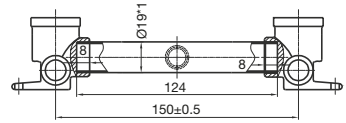
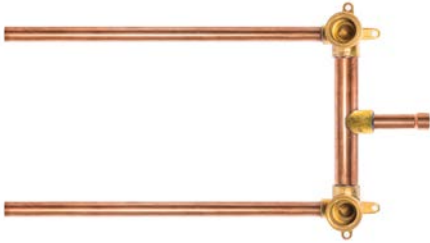


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Assemblies and Breeches

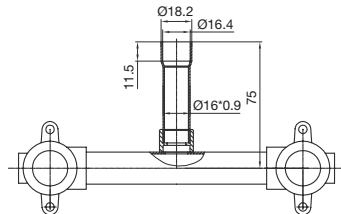
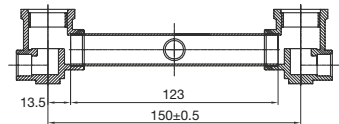
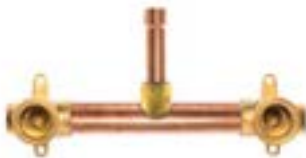
Ardent Shower Breech Bottom Entry (DN15 90mm riser)

| Code | Size |
|---------|--------------|
| 9504626 | 150mm Centre |
| | 300mm Tails |



Ardent Shower Breech Side Entry (DN18 90mm riser)

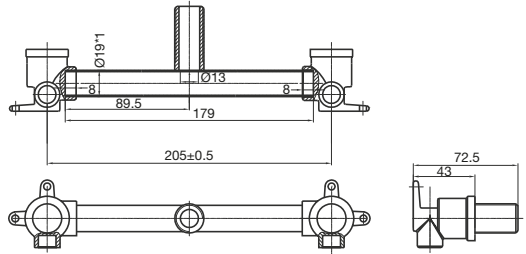
| Code | Size |
|---------|--------------|
| 9504627 | 150mm Centre |
| | NO TAILS |



Assemblies and Breeches

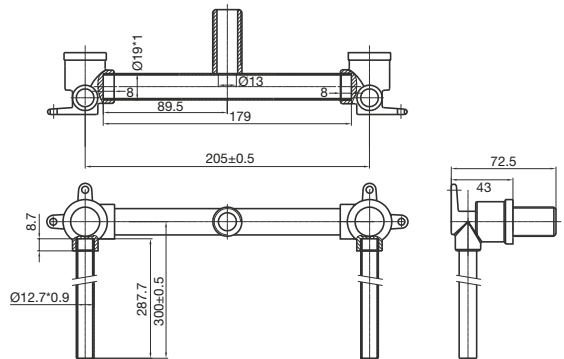
Ardent Sink Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504632 | 200mm Centre |
| | NO TAILS |



Ardent Sink Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504633 | 200mm Centre |
| | 300mm Tails |

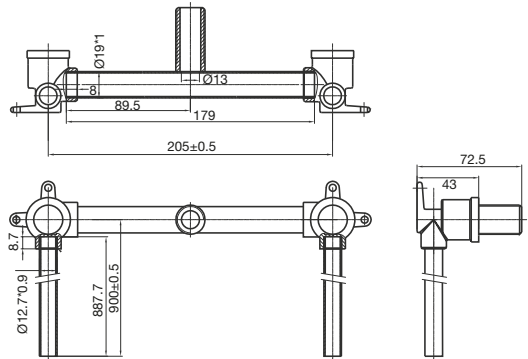


AS 3718
WMKA02260

Assemblies and Breeches

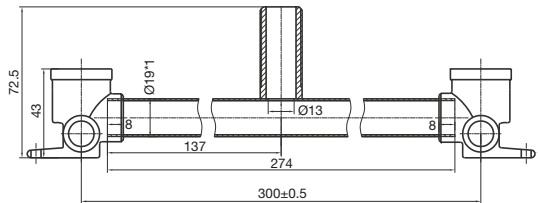
Ardent Sink Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504634 | 200mm Centre |
| | 900mm Tails |



Ardent Sink Breech Bottom Entry

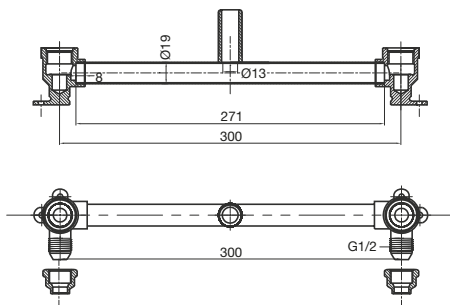
| Code | Size |
|---------|--------------|
| 9504635 | 300mm Centre |
| | NO TAILS |



Assemblies and Breeches

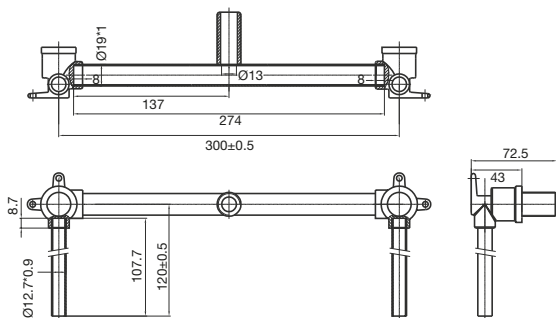
Ardent Sink Breech Bottom Entry (Compression)

| Code | Size |
|---------|--------------|
| 9504636 | 300mm Centre |
| | NO TAILS |



Ardent Sink Breech Bottom Entry

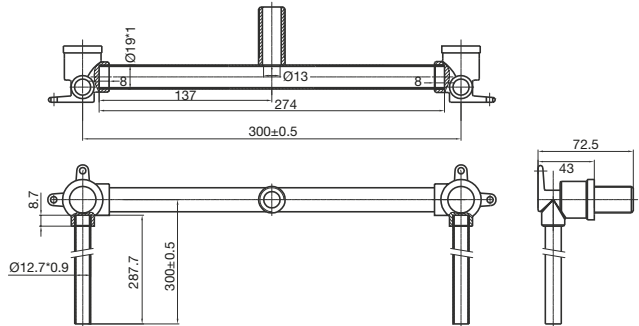
| Code | Size |
|---------|--------------|
| 9504637 | 300mm Centre |
| | 150mm Tails |



Assemblies and Breeches

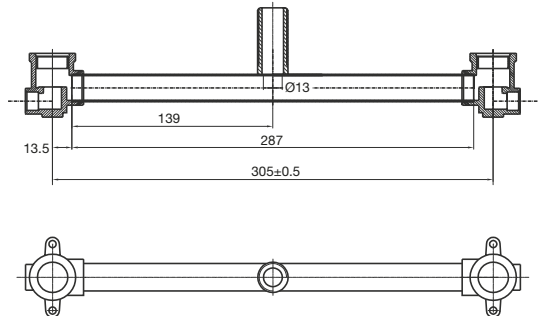
Ardent Sink Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504638 | 300mm Centre |
| | 300mm Tails |



Ardent Sink Breech Side Entry

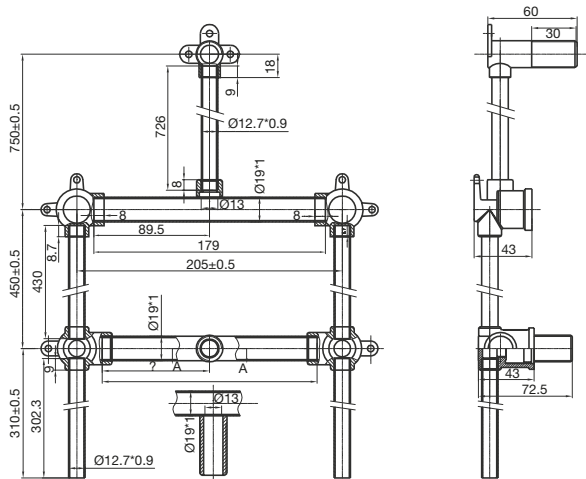
| Code | Size |
|---------|--------------|
| 9504639 | 300mm Centre |
| | NO TAILS |



Assemblies and Breeches

Ardent Bath/Shower Breech Bottom Entry

| Code | Size |
|---------|--------------|
| 9504649 | 200mm Centre |
| | 300mm Tails |



AS 3718
WMKA02260

Copper Coils

Copper Coils

Ardent Copper Coils

Ardent annealed coils have been engineered to satisfy strict Australian quality standards. The coils are manufactured to comply with AS1432 and have a product warranty of 25 years.

| Code | Description | SWP* (kPa) |
|---------|----------------------------|------------|
| 9800001 | 15mm Annealed Coil (PLN B) | 5290 |
| 9800002 | 15mm Annealed Coil (PLN A) | 6100 |
| 9800004 | 20mm Annealed Coil (PLN B) | 3970 |

*SWP = Safe Working Pressure @50°C



| Code | Dimensions | | | | | |
|---------|--|---------------------------------------|------------|------------------|------------------------|----------------------|
| | Copper Tube Outside Diameter x Wall Thickness (mm) | Copper Tube Outside Diameter (Inches) | Length (m) | Coils Per Carton | Carton Dimensions (mm) | Weight Per Coil (kg) |
| 9800001 | 12.7 x .91 | 1/2" | 18 | 3 | 500 x 500 x 85 | 9 |
| 9800002 | 12.7 x 1.02 | 1/2" | 18 | 3 | 500 x 500 x 86 | 6 |
| 9800004 | 19.05 x 1.02 | 3/4" | 18 | 2 | 650 x 650 x 85 | 9.3 |



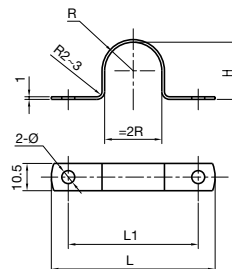
AS 1432
WMK25726

Refrigeration Saddles

Refrigeration Saddles

Ardent Refrigeration Saddles

| Code | Size | L | L1 | 2R | H |
|---------|--------|----|------|-------|------|
| 2712456 | 5/8" | 49 | 35.5 | 15.88 | 15.3 |
| 2712457 | 7/8" | 62 | 49 | 22.2 | 21.2 |
| 2712458 | 1 1/8" | 68 | 52 | 28.6 | 27.3 |
| 2712459 | 1 3/8" | 74 | 61 | 34.9 | 33.5 |



Refrigeration Coils

Refrigeration Coils

Annealed Refrigeration Copper R410A (1/4" – 3/4")

Ardent annealed refrigeration copper is made to comply with strict Australian standards AS/NZS1571 and has a 25 year warranty. It is recommended for use in applications including:

- Air conditioning
- Refrigeration
- Mechanical services

Only sizes from 1/4" to 3/4" are R410A rated.



| Code | Description | OD (mm) | Wall Thickness (mm) | Coil Length (m) |
|---------|--|---------|---------------------|-----------------|
| 9800010 | ANNEALED REFRIGERATION COIL R410A (1/4") | 6.35 | 0.81 | 30 |
| 9800012 | ANNEALED REFRIGERATION COIL R410A (3/8") | 9.52 | 0.81 | 18 |
| 9800013 | ANNEALED REFRIGERATION COIL R410A (1/2") | 12.7 | 0.81 | 18 |
| 9800014 | ANNEALED REFRIGERATION COIL R410A (5/8") | 15.88 | 1.02 | 18 |
| 9800015 | ANNEALED REFRIGERATION COIL R410A (3/4") | 19.05 | 1.14 | 18 |
| 9800016 | ANNEALED REFRIGERATION COIL (7/8") | 22 | 0.91 | 18 |

| Code | Description | Safe Working Pressure | | |
|---------|--|-----------------------------|------|------|
| | | Safe Working Pressure (kPa) | | |
| | | 50°C | 65°C | 75°C |
| 9800010 | ANNEALED REFRIGERATION COIL R410A (1/4") | 10635 | 9545 | 8820 |
| 9800012 | ANNEALED REFRIGERATION COIL R410A (3/8") | 6800 | 6105 | 5640 |
| 9800013 | ANNEALED REFRIGERATION COIL R410A (1/2") | 4995 | 4480 | 4140 |
| 9800014 | ANNEALED REFRIGERATION COIL R410A (5/8") | 5030 | 4515 | 4170 |
| 9800015 | ANNEALED REFRIGERATION COIL R410A (3/4") | 4670 | 4190 | 3870 |
| 9800016 | ANNEALED REFRIGERATION COIL (7/8") | 3140 | 2815 | 2600 |



AS/NZS 1571
SMK40029

Pair Coils

Pair Coils

Pair Coil

Ardent pair coil features a special polyethylene outer film that prevents creasing and helps to protect the insulation when passing the coil through difficult spaces. What's more, it provides UV resistance. All this makes Ardent pair coil easier to install and ensures ultra long-life performance. Ardent pair coil is R410A refrigerant compliant and available in five size combinations.



| Code | Description | Dimension | | | | | |
|---------|-----------------------------|--|---------------------------------------|-----------------|-----------------------|------------------------|----------------------|
| | | Copper Tube Outside Diameter x Wall Thickness (mm) | Copper Tube Outside Diameter (inches) | Pair Length (m) | Pair Coils Per Carton | Carton Dimensions (mm) | Weight Per Coil (kg) |
| 9800005 | PAIR COIL 1/4" X 3/8" R410A | 6.35 x 0.81 - 9.52 x 0.81 | 1/4 - 3/8 | 20 | 1 | 505 x 505 195 | 6.5 |
| 9800006 | PAIR COIL 1/4" X 1/2" R410A | 6.35 x 0.81 - 12.70 x 0.81 | 1/4 - 1/2 | 20 | 1 | 575 x 575 195 | 7.9 |
| 9800007 | PAIR COIL 1/4" X 5/8" R410A | 6.35 x 0.81 - 5.88 x 1.02 | 1/4 - 5/8 | 20 | 1 | 615 x 615 x 195 | 10.9 |
| 9800008 | PAIR COIL 3/8" X 5/8" R410A | 9.52 x 0.81 - 15.88 x 1.02 | 3/8 - 5/8 | 20 | 1 | 645 x 645 x 195 | 12.3 |
| 9800009 | PAIR COIL 3/8" X 3/4" R410A | 9.52 x 0.81 - 19.05 x 1.14 | 3/8 - 3/4 | 20 | 1 | 725 x 725 x 195 | 15.4 |

| Safe Working Pressure | | | |
|---|-----------------------------|------|------|
| Copper Tube Outside Diameter x Wall Thickness | Safe Working Pressure (kPa) | | |
| | 50°C | 65°C | 75°C |
| 6.35 x 0.81 | 10635 | 9545 | 8820 |
| 9.52 x 0.81 | 6800 | 6105 | 5640 |
| 12.70 x 0.81 | 4995 | 4480 | 4140 |
| 15.88 x 1.02 | 5030 | 4515 | 4170 |
| 19.05 x 1.14 | 4670 | 4190 | 3870 |

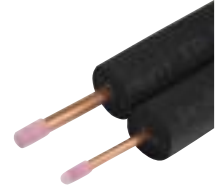


Pair Coils

Fire Retardant Pair Coil

Ardent PairCoilFR provides a quick and reliable solution to air conditioning, heating and refrigeration installations where NCC compliance is required.

- Conforms with National Construction Code fire safety regulations and requirements
- Fire rated insulation to AS/NZS 1530.3
- Available in 10mm, 13mm and 19mm insulation thickness
- Annealed copper tube manufactured to AS/NZ 1571
- R410A compliant copper
- 25 year product warranty on copper



For AWTA Fire Properties testing results, please see APPENDIX A.

| Code | Copper Tube Dimensions | | Insulation Wall Thickness (mm) | Material R-Value (K.m/W) | | Length (m) | Weight (kg) |
|---------|--|---------------------------|--------------------------------|--------------------------|------------|------------|-------------|
| | Outside Diameter x Wall Thickness (mm) | Outside Diameter (inches) | | | | | |
| 800000 | 6.35 x 0.81 - 9.52 x 0.81 | 1/4 - 3/8 | 10 | 1/4 = 0.54 | 3/8 = 0.48 | 18 | 8.5 |
| 800010 | 6.35 x 0.81 - 12.70 x 0.81 | 1/4 - 1/2 | 10 | 1/4 = 0.54 | 1/2 = 0.45 | 18 | 10.3 |
| 800011 | 6.35 x 0.81 - 15.88 x 1.02 | 1/4 - 5/8 | 10 | 3/8 = 0.48 | 5/8 = 0.42 | 18 | 13.1 |
| 800012 | 9.52 x 0.81 - 15.88 x 1.02 | 3/8 - 5/8 | 10 | 3/8 = 0.48 | 3/4 = 0.40 | 18 | 14.4 |
| 800013 | 9.52 x 0.81 - 19.05 x 1.14 | 3/8 - 3/4 | 10 | 1/2 = 0.45 | 3/4 = 0.40 | 18 | 15.9 |
| 9800167 | 6.35 x 0.81 - 9.52 x 0.81 | 1/4 - 3/8 | 13 | 1/4 = 0.73 | 3/8 = 0.63 | 20 | 10.2 |
| 9800168 | 6.35 x 0.81 - 12.70 x 0.81 | 1/4 - 1/2 | 13 | 1/4 = 0.73 | 1/2 = 0.58 | 20 | 11.34 |
| 9800169 | 6.35 x 0.81 - 15.88 x 1.02 | 1/4 - 5/8 | 13 | 1/4 = 0.73 | 5/8 = 0.55 | 20 | 15.6 |
| 9800170 | 9.52 x 0.81 - 15.88 x 1.02 | 3/8 - 5/8 | 13 | 3/8 = 0.63 | 5/8 = 0.55 | 20 | 17.4 |
| 9800171 | 9.52 x 0.81 - 19.05 x 1.14 | 3/8 - 3/4 | 13 | 3/8 = 0.63 | 3/4 = 0.53 | 20 | 19.5 |
| 9800172 | 6.35 x 0.81 - 9.52 x 0.81 | 1/4 - 3/8 | 19 | 1/4 = 1.25 | 3/8 = 1.10 | 18 | 11.84 |
| 9800173 | 6.35 x 0.81 - 12.70 x 0.81 | 1/4 - 1/2 | 19 | 1/4 = 1.25 | 1/2 = 1.00 | 18 | 13.97 |
| 9800174 | 6.35 x 0.81 - 15.88 x 1.02 | 1/4 - 5/8 | 19 - 21 | 1/4 = 1.25 | 5/8 = 1.07 | 18 | 16.7 |
| 9800175 | 9.52 x 0.81 - 15.88 x 1.02 | 3/8 - 5/8 | 19 - 21 | 3/8 = 1.10 | 5/8 = 1.07 | 18 | 20.3 |
| 9800176 | 9.52 x 0.81 - 19.05 x 1.14 | 3/8 - 3/4 | 19 - 21 | 3/8 = 1.10 | 3/4 = 1.02 | 18 | 21.85 |

| Safe Working Pressure | | | |
|---|-----------------------------|------|------|
| Copper Tube Outside Diameter x Wall Thickness | Safe Working Pressure (kPa) | | |
| | 50°C | 65°C | 75°C |
| 6.35 x 0.81 | 10635 | 9545 | 8820 |
| 9.52 x 0.81 | 6800 | 6105 | 5640 |
| 12.70 x 0.81 | 4995 | 4480 | 4140 |
| 15.88 x 1.02 | 5030 | 4515 | 4170 |
| 19.05 x 1.14 | 4670 | 4190 | 3870 |

Pipe insulation properties tested and calculated in accordance with AS/NZS 4859.1

| Thermal Conductivity @23°C (W/m.K) | Water Absorption (% W/W) | Vapour Barrier (μ) | Fungal Growth | Working Temperature (°C) |
|------------------------------------|--------------------------|--------------------|---------------|--------------------------|
| 0.0334 | 3.85 | >6000 | Nil | -40 to +105 |



AS/NZS 1571
SMK40029

Appendix A – AWTA Product Testing

13mm Tube Insulation

| | |
|--------------------|---------------------|
| Colour | Black |
| Approximate Weight | 816g/m ² |
| End Use | Insulation |

MATERIAL SPECIFICATION PROVIDED BY CLIENT

| | |
|---------------------|--------------------------|
| Nominal Composition | Nitrile Butadiene Rubber |
| Nominal Thickness | 13mm |

AS/NZS 1530.3 - 1999

Methods for Fire Tests on Building Materials, Components and Structures
Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release

RESULTS

| | | |
|-----------------------------|---------------------|-----------------------|
| Face tested | Face | |
| Date tested | 15/05/2017 | |
| | <u>Mean</u> | <u>Standard Error</u> |
| Ignition time | 0 min | Nil |
| Flame propagation time | 0 sec | Nil |
| Heat release integral | 0 kJ/m ² | Nil |
| Smoke release, log d | -1.3699 | 0.1045 |
| Optical density, d | 0.0510 | – |
| Number of specimens ignited | 0 | |
| Number of specimens tested | 6 | |

REGULATORY INDICES

| | | |
|-----------------------|---|--------------|
| | | <u>Range</u> |
| Ignitability Index | 0 | 0–20 |
| Spread of Flame Index | 0 | 0–10 |
| Heat Evolved Index | 0 | 0–10 |
| Smoke Developed Index | 3 | 0–10 |

These results only apply to the specimen mounted, as described in this report. The results of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Ignition is initiated by a pilot flame that is held near, but does not touch the specimen. A material that does not ignite during the standard test may ignite if contacted with a pilot flame during the test.

Each test specimen had an unattached backing of 4.5mm thick fibre reinforced cement board.

Each test specimen was clamped along all sides.

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