



CERTIFICATE OF APPROVAL

No CF 5407

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

ASTROFLAME FIRESEALS LIMITED

Unit 8 The IO Centre, Stephenson Road, Segensworth, Fareham,
Hampshire, PO15 5RU
Tel: 01329 844500

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT

ASTROFLAME ASTRO X SERIES
CE PIPE WRAP

TECHNICAL SCHEDULE

TS 03 Penetration Sealing
Systems

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager



Issued: 10th July 2021
Valid to: 21st April 2026

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CERTIFICATE No CF 5407

ASTROFLAME FIRESEALS LTD

1. This approval relates to the use of ASTROFLAME ASTRO X SERIES CE PIPE WRAP for the fire protection where services are penetrating walls. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the thickness and acceptable services for ASTROFLAME ASTRO X SERIES CE PIPE WRAP required to provide fire resistance periods in accordance with BS EN 1366-3: 2009 of up to 120 minutes for differing services and substrate constructions. The scope of certification complies with the guidelines stated in the ASFP Red Book: 4th Edition for 3rd party certification schemes.
2. This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
3. The product is approved on the basis of:
 - i) Initial type testing
 - ii) Audit testing at the frequency specified in TS03
 - iii) A design appraisal against TS03
 - iv) Inspection and surveillance of factory production control
4. The walls shall be at least 100 mm thick and have at least the same fire resistance performance as that required for the penetration seal. The floors shall be at least 150 mm thick and have at least the same fire resistance performance as that required for the penetration seal. Specific requirements for the floors and walls are provided with each of the approval matrices provided herein.
5. The services which may be fitted through the seals are uPVC, ABS, PP and HDPE pipes of various sizes, as detailed within the Approval Matrix included in this Certificate.
6. The approval relates to ongoing production. Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.
7. Service apertures shall be a minimum of 200mm from each other, and from the wall/floor edge.

Further Information

Further information regarding the details contained in this data sheet may be obtained from Astroflame Fireseals Limited (Tel: 01329 844500).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel:01925 646777).

CERTIFICATE No CF 5407 ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Floors 150mm minimum thickness. | | | | | | |
|---|--|--------------------------------|--|------------------|-------------------|---------|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PVC-U Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 1.8 | | 40 x 2 | 60 mins | 60 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.2 | 3.5 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.6 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.1 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.5 | 5.2 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.4 | 7.5 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.8 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 5.6 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.1 | 9.6 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.7 | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | |





CERTIFICATE No CF 5407

ASTROFLAME FIRESEALS LTD

ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Floors 150mm minimum thickness.

| | | | | | | |
|--|--|----------------------------|--|------------------|-------------------|----------|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PVC-U Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| | | | | Integrity | Insulation | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 1.8 | | 40 x 2 | 120 mins | 120 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | |

CERTIFICATE No CF 5407 ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Floors 150mm minimum thickness. | | | | | | | | |
|---|--|----------------------------|------|--|------------------|-------------------|--|--|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | | | |
| Penetration Specification (PP Pipes) | | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | | Integrity | Insulation | | |
| | | Min. | Max. | | | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 15 mins | 15 mins | | |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.0 | 6.2 | 40 x 4 | | | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.2 | | | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.3 | | | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.5 | 9.5 | 40 x 6 | | | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.6 | | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.8 | | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.9 | 14.1 | 40 x 8 | | | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.2 | | | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.4 | | | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | 18.2 | 40 x 10 | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | | | |



CERTIFICATE No CF 5407

ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix | | | | | | |
|---|--|------------------------|---|-----------|------------|---------|
| Floors 150mm minimum thickness. | | | | | | |
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PP Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 90 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.0 | 6.2 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 5.0 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.2 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.3 | 9.5 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 9.5 | 14.1 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 10.7 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 12.7 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 14.1 | 18.2 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | |



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ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix | | | | | | |
|---|--|---------------------|---|-----------|------------|----------|
| Floors 150mm minimum thickness. | | | | | | |
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PP Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 120 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | |

CERTIFICATE No CF 5407 ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Floors 150mm minimum thickness. | | | | | | | | |
|---|--|------------------------|------|---|-----------|------------|--|--|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 150mm thick Rigid Floor | | | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | | | |
| Penetration Specification (PE Pipes) | | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | | Integrity | Insulation | | |
| | | Min. | Max. | | | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 1.8 | | 40 x 2 | 120 mins | 120 mins | | |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.0 | 4.7 | 40 x 4 | | | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.2 | | | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.3 | | | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.5 | 6.6 | 40 x 6 | | | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.6 | | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.8 | | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.9 | 9.1 | 40 x 8 | | | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.2 | | | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.4 | | | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | 11.4 | 40 x 10 | | | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| Floors: | The floors shall be a minimum of 150 mm thick, constructed from concrete/masonry with a minimum density 650 kg/m ³ . The floor shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. | | | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the floor, fitted flush to the slab on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. | | | | | | | |



CERTIFICATE No CF 5407 ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | |
|--|--|------------------------|------|---|-----------|------------|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PVC-U Pipes) | | | | Intumescent Material Width x Thickness (mm) | U/C C/C | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | | Integrity | Insulation |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 1.8 | | 40 x 2 | 90 mins | 90 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.2 | 4.0 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.6 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.1 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.5 | 6.4 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.4 | 9.5 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.8 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 5.6 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.2 | 9.6 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.7 | | | | |
| Walls: | The walls shall be a minimum of 100 mm thick. All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m ³ density. Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m ³ and minimum nominal thickness 50mm. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | | |





CERTIFICATE No CF 5407
ASTROFLAME FIRESEALS LTD

| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix | | | | | | |
|---|---|---|---|-----------|------------|----------|
| Walls 100mm minimum thickness. | | | | | | |
| Product Name: | | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | |
| Maximum Annulus: | | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | |
| Penetration Specification (PVC-U Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 1.8 | | 40 x 2 | 120 mins | 120 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 9.5 | | 40 x 8 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.7 | 9.6 | | | |
| Walls: | <p>The walls shall be a minimum of 100 mm thick. All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m³ density. Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m³ and minimum nominal thickness 50mm.</p> | | | | | |
| Application Technique: | <p>The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps.</p> | | | | | |
| Service Support Requirements: | <p>Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall.</p> | | | | | |



CERTIFICATE No CF 5407

ASTROFLAME FIRESEALS LTD

| | | | | | | |
|--|---|---|--|------------------|-------------------|---------|
| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | |
| Product Name: | | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | |
| Maximum Annulus: | | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | |
| Penetration Specification (PP Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 20 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.0 | 6.3 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.1 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.2 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.3 | 9.8 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.6 | 14.6 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.7 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.9 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.0 | 18.2 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | | | | |
| 250 | 250 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 10.1 | | 40 x 12 | | |
| Walls: | | <p>The walls shall be a minimum of 100 mm thick.</p> <p>All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP.</p> <p>Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m³ density.</p> <p>Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m³ and minimum nominal thickness 50mm.</p> | | | | |
| Application Technique: | | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | |
| Service Support Requirements: | | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | |

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| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix | | | | | | |
|---|--|------------------------|---|-----------|------------|---------|
| Walls 100mm minimum thickness. | | | | | | |
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PP Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 90 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.0 | 6.3 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.1 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.2 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.3 | 9.8 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.4 | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.6 | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.7 | 14.6 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.9 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.0 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | 18.2 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| Walls: | The walls shall be a minimum of 100 mm thick. All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m ³ density. Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m ³ and minimum nominal thickness 50mm. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the face of the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | | |





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ASTROFLAME FIRESEALS LTD

| | | | | | | |
|--|---|---|--|------------------|-------------------|----------|
| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | |
| Product Name: | | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | |
| Maximum Annulus: | | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | |
| Penetration Specification (PP Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 120 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.1 | 6.3 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 5.1 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.3 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.3 | 9.8 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.5 | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 8.5 | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 9.8 | 14.6 | 40 x 8 | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 11.0 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 13.1 | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 14.6 | 18.2 | 40 x 10 | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 18.2 | | | | |
| Walls: | | <p>The walls shall be a minimum of 100 mm thick.</p> <p>All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP.</p> <p>Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m³ density.</p> <p>Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m³ and minimum nominal thickness 50mm.</p> | | | | |
| Application Technique: | | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the face of the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | |
| Service Support Requirements: | | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | |



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| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | | | |
|--|---|----------------------------|--|------------------|-------------------|---------|--|--|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | | | |
| Penetration Specification (PE Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | | | |
| | | Min. | Max. | | | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 15 mins | 15 mins | | |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.1 | 4.8 | 40 x 4 | | | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.3 | | | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.5 | | | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.7 | 6.8 | 40 x 6 | | | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.9 | | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.1 | | | | | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.3 | 9.5 | 40 x 8 | | | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.6 | | | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | | | | | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.9 | 18.4 | 40 x 10 | | | | |
| Walls: | <p>The walls shall be a minimum of 100 mm thick.</p> <p>All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP.</p> <p>Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m³ density.</p> <p>Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m³ and minimum nominal thickness 50mm.</p> | | | | | | | |
| Application Technique: | <p>The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the face of the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps.</p> | | | | | | | |
| Service Support Requirements: | <p>Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall.</p> | | | | | | | |

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| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | |
|--|--|------------------------|------|---|-----------|------------|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PE Pipes) | | | | Intumescent Material Width x Thickness (mm) | U/C C/C | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | | Integrity | Insulation |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 90 mins | 90 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 55 | 55 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 3.6 | 4.8 | 40 x 4 | | |
| 63 | 63 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.2 | | | | |
| 75 | 75 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 4.8 | | | | |
| 82 | 82 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 5.5 | 6.8 | 40 x 6 | | |
| 90 | 90 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 100 | 100 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.1 | 9.5 | 40 x 8 | | |
| 110 | 110 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 6.8 | | | | |
| 125 | 125 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 7.5 | | | | |
| 140 | 140 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 8.7 | 18.4 | 40 x 10 | | |
| 160 | 160 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 9.5 | | | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| Walls: | The walls shall be a minimum of 100 mm thick. All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m ³ density. Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m ³ and minimum nominal thickness 50mm. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the face of the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | | |



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| ASTROFLAME ASTRO X SERIES CE PIPE WRAP - Approval Matrix Walls 100mm minimum thickness. | | | | | | |
|--|--|------------------------|---|-----------|------------|----------|
| Product Name: | ASTROFLAME ASTRO X SERIES CE PIPE WRAP Installed Both Sides of Minimum 100mm thick Wall | | | | | |
| Maximum Annulus: | 12mm filled with min. 5mm deep Astroflame Fireseals Ltd. ASTRO INTUMASTIC | | | | | |
| Penetration Specification (PE Pipes) | | | Intumescent Material Width x Thickness (mm) | U/C C/C | | |
| Outer Diameter (mm) | Wrap Reference | Wall Thickness (mm) | | Integrity | Insulation | |
| | | Min. | Max. | | | |
| 32 | 32 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 2.9 | | 40 x 2 | 120 mins | 120 mins |
| 40 | 40 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 50 | 50 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | | | | | |
| 200 | 200 mm ASTROFLAME ASTRO X SERIES CE PIPE WRAP | 18.4 | | 40 x 10 | | |
| Walls: | The walls shall be a minimum of 100 mm thick. All walls shall have at least the same fire resistance performance as that required of the ASTROFLAME ASTRO X SERIES CE PIPE WRAP. Rigid walls should comprise concrete or masonry blocks/bricks of a minimum 450kg/m ³ density. Flexible walls should be comprised of gypsum 'type F' plasterboard in accordance with EN 520, with at least 2No layers, each a minimum of 12.5mm thick, to each side. Cavity wall mineral wool insulation must be installed, of minimum nominal density 100 kg/m ³ and minimum nominal thickness 50mm. | | | | | |
| Application Technique: | The ASTROFLAME ASTRO X SERIES CE PIPE WRAP is folded around the pipe, secured tightly with adhesive tape and inserted into the annular space between the pipe and the wall, fitted flush to the face of the wall on both sides. A minimum 5mm deep bead of ASTRO INTUMASTIC acrylic sealant is then applied over the wraps. | | | | | |
| Service Support Requirements: | Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the upper surface of the seal. Services should be rigidly supported via steel angles, hangers or channels, not further than 400 mm from the surface of the seal, on both sides of the wall. | | | | | |