



# FirePro® Fire Tube

## Fire protection for structural steel

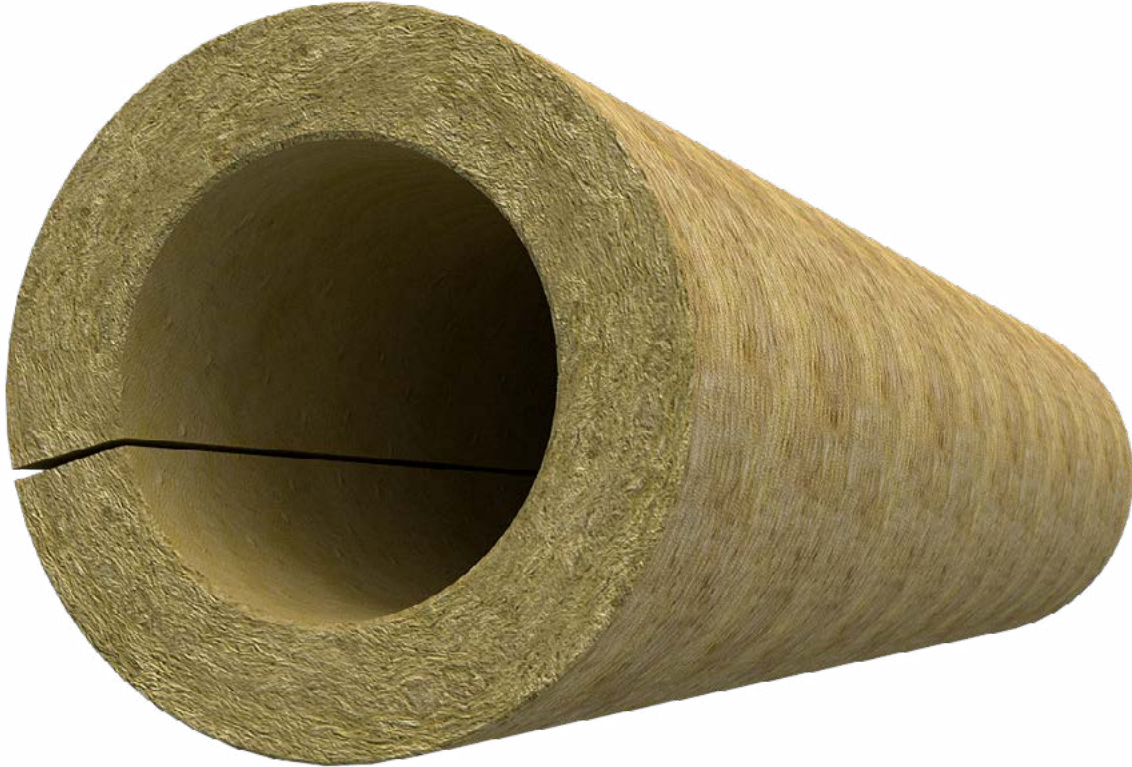
FirePro Fire Tube is a pre-formed cylindrical insulation manufactured using ROCKWOOL stone wool. The product is available with an optional aluminium foil facing.

Fire Tube is suitable for structural steel circular columns up to 438mm in diameter, and is supplied in metre lengths.

For standard wall thicknesses and size availability, please see the current ROCKWOOL price list.



# FirePro Fire Tube



## APPLICATIONS

Fire Tube has been tested to fire protect structural steel circular hollow columns.

It may be possible to use this test data in assessing the performance of Fire Tube when applied to other circular elements, such as pipework - however such assessments should be undertaken by a suitably qualified individual.

Please contact the ROCKWOOL Fire Team for further information.

# FirePro Fire Tube

## PERFORMANCE

### Fire performance

Fire Tube has been designed to fire protect structural steel circular hollow columns in the range of 350°C to 750°C for fire resistance periods of up to 3 hours.

The required wall thickness of Fire Tube to provide a particular fire resistance for a specified period depends on the diameter, wall thickness and design temperature of the steel column.

### Structural steel fire protection

The following table gives the thickness of Fire Tube required to protect standard circular hollow sections for up to 3 hours.

For sections not covered, or alternative design temperatures, please contact ROCKWOOL Technical for assistance in calculating the required thickness of Fire Tube.

| O.D. (mm) | Circular hollow section |             |                                 |                        | Required thickness (mm) for a given protection period |        |        |         |         |         |                          |        |        |         |         |         |
|-----------|-------------------------|-------------|---------------------------------|------------------------|---|--------|--------|---------|---------|---------|--------------------------|--------|--------|---------|---------|---------|
|           | Wall thickness (mm)     | Mass (kg/m) | Section Area (cm <sup>2</sup> ) | A/V (m <sup>-1</sup> ) | Design temperature 400°C                              |        |        |         |         |         | Design temperature 550°C |        |        |         |         |         |
|           |                         |             |                                 |                        | 30 min  | 60 min | 90 min | 120 min | 150 min | 180 min | 30 min                   | 60 min | 90 min | 120 min | 150 min | 180 min |
| 33.7      | 3.6                     | 2.67        | 3.4                             | 310                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 2.93        | 3.73                            | 285                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
| 42.4      | 3.6                     | 3.44        | 4.39                            | 305                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 3.79        | 4.83                            | 275                    | 25  | 55     | 90     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 4.61        | 5.87                            | 230                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 35     | 65     | 90      | -       | -       |
| 48.3      | 3.6                     | 3.97        | 5.06                            | 300                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 4.37        | 5.57                            | 270                    | 25  | 55     | 90     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 5.34        | 6.8                             | 225                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 35     | 65     | 90      | -       | -       |
| 60.3      | 3.6                     | 5.03        | 6.41                            | 295                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 5.55        | 7.07                            | 270                    | 25  | 55     | 90     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 6.82        | 8.69                            | 220                    | 25  | 50     | 85     | -       | -       | -       | 25                       | 35     | 60     | 90      | -       | -       |
| 76.1      | 3.6                     | 6.44        | 8.2                             | 290                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 7.11        | 9.06                            | 265                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 8.77        | 11.2                            | 215                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 90      | -       | -       |
|           | 6.3                     | 10.8        | 13.8                            | 175                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | -       | -       |
| 88.9      | 3.6                     | 7.57        | 9.65                            | 290                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 8.38        | 10.7                            | 260                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 10.3        | 13.2                            | 210                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 12.8        | 16.3                            | 170                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | -       | -       |
| 114.3     | 3.6                     | 9.83        | 12.5                            | 285                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 10.9        | 13.9                            | 260                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 40     | 65     | 95      | -       | -       |
|           | 5                       | 13.5        | 17.2                            | 210                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 16.8        | 21.4                            | 170                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | -       | -       |
| 139.7     | 3.6                     | 12.1        | 15.4                            | 285                    | 25  | 60     | 90     | -       | -       | -       | 25                       | 40     | 70     | 95      | -       | -       |
|           | 4                       | 13.4        | 17.1                            | 255                    | 25  | 55     | 85     | -       | -       | -       | 25                       | 40     | 65     | 90      | -       | -       |
|           | 5                       | 16.6        | 21.2                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 20.7        | 26.4                            | 165                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | 105     | -       |
|           | 8                       | 26          | 33.1                            | 135                    | 25  | 40     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 75      | 100     | -       |
|           | 10                      | 32          | 40.7                            | 110                    | 25  | 30     | 60     | 85      | -       | -       | 25                       | 25     | 40     | 65      | 90      | -       |
| 168.3     | 5                       | 20.1        | 25.7                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 25.2        | 32.1                            | 165                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | 105     | -       |
|           | 8                       | 31.6        | 40.3                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|           | 10                      | 39          | 49.7                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|           | 12.5                    | 48          | 61.2                            | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
| 193.7     | 5                       | 23.3        | 29.6                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 29.1        | 37.1                            | 165                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | 105     | -       |
|           | 8                       | 36.6        | 46.7                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|           | 10                      | 45.3        | 57.7                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|           | 12.5                    | 55.9        | 71.2                            | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
| 219.1     | 5                       | 26.4        | 33.6                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|           | 6.3                     | 33.1        | 42.1                            | 165                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | 105     | -       |
|           | 8                       | 41.6        | 53.1                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|           | 10                      | 51.6        | 65.7                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|           | 12.5                    | 63.7        | 81.1                            | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
|           | 14.2                    | 71.8        | 91.4                            | 75                     | 25  | 25     | 40     | 65      | 90      | -       | 25                       | 25     | 25     | 45      | 70      | 95      |
| 16        | 80.1                    | 102         | 65                              | 25                     | 25  | 35     | 55     | 80      | 100     | 25      | 25                       | 25     | 35     | 60      | 85      |         |

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# FirePro Fire Tube

| Circular hollow section |                     |             |                                 |                        | Required thickness (mm) for a given protection period |        |        |         |         |         |                          |        |        |         |         |         |
|-------------------------|---------------------|-------------|---------------------------------|------------------------|---|--------|--------|---------|---------|---------|--------------------------|--------|--------|---------|---------|---------|
|                         |                     |             |                                 |                        | Design temperature 400°C                              |        |        |         |         |         | Design temperature 550°C |        |        |         |         |         |
|                         |                     |             |                                 |                        | 30 min  | 60 min | 90 min | 120 min | 150 min | 180 min | 30 min                   | 60 min | 90 min | 120 min | 150 min | 180 min |
| O.D. (mm)               | Wall thickness (mm) | Mass (kg/m) | Section Area (cm <sup>2</sup> ) | A/V (m <sup>-1</sup> ) |   |        |        |         |         |         |                          |        |        |         |         |         |
| 244.5                   | 5                   | 29.5        | 37.6                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|                         | 6.3                 | 37          | 47.1                            | 165                    | 25  | 45     | 75     | 105     | -       | -       | 25                       | 30     | 55     | 80      | 105     | -       |
|                         | 8                   | 46.7        | 59.4                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|                         | 10                  | 57.8        | 73.7                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|                         | 12.5                | 71.5        | 91.1                            | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
|                         | 14.2                | 80.6        | 103                             | 75                     | 25  | 25     | 40     | 65      | 90      | -       | 25                       | 25     | 25     | 45      | 70      | 95      |
|                         | 16                  | 90.2        | 115                             | 65                     | 25  | 25     | 35     | 55      | 80      | 100     | 25                       | 25     | 25     | 35      | 60      | 85      |
| 273                     | 5                   | 33          | 42.1                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|                         | 6.3                 | 41.4        | 52.8                            | 160                    | 25  | 45     | 75     | 100     | -       | -       | 25                       | 25     | 55     | 80      | 105     | -       |
|                         | 8                   | 52.3        | 66.6                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|                         | 10                  | 64.9        | 82.6                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|                         | 12.5                | 80.3        | 102                             | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
|                         | 14.2                | 90.6        | 115                             | 75                     | 25  | 25     | 40     | 65      | 90      | -       | 25                       | 25     | 25     | 45      | 70      | 95      |
|                         | 16                  | 101         | 129                             | 65                     | 25  | 25     | 35     | 55      | 80      | 100     | 25                       | 25     | 25     | 35      | 60      | 85      |
| 323.9                   | 5                   | 39.3        | 50.1                            | 205                    | 25  | 50     | 80     | -       | -       | -       | 25                       | 35     | 60     | 85      | -       | -       |
|                         | 6.3                 | 49.3        | 62.9                            | 160                    | 25  | 45     | 75     | 100     | -       | -       | 25                       | 25     | 55     | 80      | 105     | -       |
|                         | 8                   | 62.3        | 79.4                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|                         | 10                  | 77.4        | 98.6                            | 105                    | 25  | 30     | 55     | 85      | -       | -       | 25                       | 25     | 35     | 60      | 90      | -       |
|                         | 12.5                | 96          | 122                             | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
|                         | 14.2                | 108         | 138                             | 75                     | 25  | 25     | 40     | 65      | 90      | -       | 25                       | 25     | 25     | 45      | 70      | 95      |
|                         | 16                  | 121         | 155                             | 65                     | 25  | 25     | 35     | 55      | 80      | 100     | 25                       | 25     | 25     | 35      | 60      | 85      |
| 355.6                   | 6.3                 | 54.3        | 69.1                            | 160                    | 25  | 45     | 75     | 100     | -       | -       | 25                       | 25     | 55     | 80      | 105     | -       |
|                         | 8                   | 68.6        | 87.4                            | 130                    | 25  | 35     | 65     | 95      | -       | -       | 25                       | 25     | 45     | 70      | 100     | -       |
|                         | 10                  | 85.2        | 109                             | 100                    | 25  | 30     | 55     | 80      | 105     | -       | 25                       | 25     | 35     | 60      | 85      | -       |
|                         | 12.5                | 106         | 135                             | 85                     | 25  | 25     | 45     | 70      | 95      | -       | 25                       | 25     | 25     | 50      | 75      | 100     |
|                         | 14.2                | 120         | 152                             | 75                     | 25  | 25     | 40     | 65      | 90      | -       | 25                       | 25     | 25     | 45      | 70      | 95      |
|                         | 16                  | 134         | 171                             | 65                     | 25  | 25     | 35     | 55      | 80      | 100     | 25                       | 25     | 25     | 35      | 60      | 85      |
|                         | 406.4               | 6.3         | 62.2                            | 79.2                   | 160   | 25     | 45     | 75      | 100     | -       | -                        | 25     | 25     | 55      | 80      | 105     |
| 8                       | 78.6                | 100         | 130                             | 25                     | 35  | 65     | 95     | -       | -       | 25      | 25                       | 45     | 70     | 100     | -       |         |
| 10                      | 97.8                | 125         | 100                             | 25                     | 30  | 55     | 80     | 105     | -       | 25      | 25                       | 35     | 60     | 85      | -       |         |
| 12.5                    | 121                 | 155         | 80                              | 25                     | 25  | 45     | 70     | 95      | -       | 25      | 25                       | 25     | 50     | 75      | 95      |         |
| 14.2                    | 137                 | 175         | 75                              | 25                     | 25  | 40     | 65     | 90      | -       | 25      | 25                       | 25     | 45     | 70      | 95      |         |
| 16                      | 154                 | 196         | 65                              | 25                     | 25  | 35     | 55     | 80      | 100     | 25      | 25                       | 25     | 35     | 60      | 85      |         |

## PRODUCT INFORMATION

| Property                | Description   |
|-------------------------|---------------|
| Length                  | 1000mm        |
| Internal diameter range | Up to 438mm   |
| Thickness range         | 25 – 100mm    |
| Fire resistance         | Up to 3 hours |

## STANDARDS AND APPROVALS

Fire Tube has been authorised for use in LUL surface and sub-surface premises when installed in accordance with this datasheet - please refer to the LUL Approved Product Register website [www.LU-apr.co.uk](http://www.LU-apr.co.uk) for specific details.

## INSTALLATION

FirePro Fire Tube is light and easy to cut to shape using a saw or a sharp knife.

All joints should be held firmly together with temporary bands of steel wire, jubilee clips or plastic cable ties at 200mm centres until the glue has fully cured.

If installed outdoors, Fire Tube must be protected from the weather. Prior to use, Fire Tube should be stored indoors or protected by a weatherproof covering

# FirePro Fire Tube

## BUILDING SAFETY AND PRODUCT USE

### LEGAL NOTICES

#### General safety requirements – Building Safety Act 2022

ROCKWOOL Limited is committed to supporting specifiers, resellers and users of ROCKWOOL products for the full life cycle of the product to comply with the obligations and responsibilities set out in the Building Safety Act 2022. With regard to the general safety requirements of the Act, ROCKWOOL Limited cannot control or foresee every situation where its products might be used. We therefore strongly advise that specifiers, resellers and users contact us where use of ROCKWOOL products is contemplated in applications different from those explicitly described in the latest, relevant ROCKWOOL product datasheets; especially in applications that can be reasonably foreseen as critical to safety.

ROCKWOOL Limited reserves the right to amend the specification of its products without notice. Changes to the ROCKWOOL manufacturing process, or to pertinent regulations, may be reflected in changes to tested and certified product performance. Whilst ROCKWOOL Limited endeavours to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law or other developments affecting the accuracy of the information contained in our publications.

ROCKWOOL Limited does not accept responsibility for the consequences of using (including testing or certifying) its products in applications different from those explicitly described in the relevant ROCKWOOL product datasheets. Expert advice should be sought, and ROCKWOOL Limited should be contacted, where such different use is contemplated, or where the extent of any use described by ROCKWOOL Limited is in doubt.

#### The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the most important assets of the ROCKWOOL Group, and is therefore well-protected and defended by ROCKWOOL throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion, you must apply for a Trade Mark Usage Agreement.

To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

#### Trademarks

Registered trademarks of the ROCKWOOL Group include but are not limited to:

ROCKWOOL®, RockClose®, RainScreen Duo Slab®, HardRock®, RockFloor®, Flexi®, RockFall®, FirePro®, DuctRock®, BeamClad®, NyRock®

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To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

### HEALTH & SAFETY

A Material Safety Data Sheet is available and can be downloaded from [www.rockwool.com/uk](http://www.rockwool.com/uk) to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH)

# FirePro Fire Tube

## ROCKWOOL stone wool - safe to install and live alongside

There are no hazardous classifications associated with stone wool insulation manufactured by ROCKWOOL-UK according to EU REACH and UK REACH regulations on health and the environment.

ROCKWOOL safe use instruction sheets and material safety data sheets (where applicable) can be downloaded [here](#).



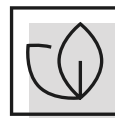
### Sustainability

ROCKWOOL products are used to enrich modern living, creating safer, healthier and more climate-resilient communities.

We transform abundant, natural volcanic rock into stone wool insulation products that are used to reduce energy demand, lower fuel bills and help address society's climate change challenges.

ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. Please contact us for details of how we can work together to recycle waste ROCKWOOL stone wool material that may be generated during on-site installation.

Our annual sustainability reports, which set out progress against our sustainability goals, and further details of the positive impacts of using our products can be found on our website.



### Environment

ROCKWOOL takes a fact-based, auditable approach to documenting our progress in maximising our products' positive impact and minimising the effect our operations have on the environment, backed by third-party references and methodologies. Further details can be found online in our annual sustainability report.

Our high-tech production process uses filters, pre-heaters, after-burners and other cleaning and collection systems that help to reduce the effects of our manufacturing operations on the environment.

ROCKWOOL stone wool insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

