

INSTALLATION Guide

How to use



01
pag 4

Table of Contents

TROCELLEN ITALIA S.P.A.

02
pag 8

INTRODUCTION TO THE MANUAL

03
pag 10

GENERAL INSTRUCTIONS

- 3.1) Trocellen insulating products
- 3.2) Trocellen accessories
- 3.3) Installation tools
- 3.4) General notes for installing insulations

04
pag 18

Table of Contents

INSTRUCTIONS FOR INSTALLING TROCELLEN DUCTS

- 4.1) Insulating air ducts
- 4.2) Installing self-adhesive materials on rectangular ducts
- 4.3) Installing non-adhesive materials on rectangular ducts
- 4.4) Installing self-adhesive materials on circular ducts
- 4.5) Installing non-adhesive materials on circular ducts
- 4.6) Installing multi-layer non-adhesive insulation material on circular ducts
- 4.7) Insulating flanges

05
pag 32

INSTRUCTIONS FOR INSTALLING TROCELLEN SLEEVES

- 5.1) Fitting the sleeve
- 5.2) Insulating straight sections
- 5.3) Insulating curved sections and T-shaped joints
- 5.4) Insulating flanges

06
pag 46

INSTRUCTIONS FOR INSULATING SILOS AND TANKS WITH TROCELLEN ROLLS

Trocellen Italia S.p.A.

01

Trocellen is a multinational company owned by Furukawa Electric Co. Ltd, internationally renowned for the design and manufacture of cross-linked polyolefin foams.

Through its different Business Units, the company is able to meet the specific needs of the market with a wide range of products and solutions. It manufactures both semi-finished and finished products.

The Trocellen products stand out for their manufacturing processes and the many industrial sectors in which they can be used: Insulation, automotive, footwear, sport and leisure, adhesive tapes and packaging.

Trocellen makes safety a lifestyle and turns safety into a lifestyle.

Insulation Business Unit

The Insulation Business Unit mainly specialises in Sound and Thermal insulation for the building industry.

The goal is to create comfortable environments for people or rather to “help people live better!”



VISION

Making a difference - Shaping the future

We shape a safe and comfortable future with products that make a difference. Our “smart solutions” improve people's lives and promote our partners' businesses. We take pride running a prospering company, a first-choice workplace and a number of responsible business operations.

MISSION

Expanding the horizon for advanced solutions

Relying on our broad experience, know-how and the extensive support of our owner in the background, we keep looking for innovative ways of product development. To this end, we work together with our partners to develop and maximise industry performance. We are open to adapt our methods to meet our partners' requirements; we aim to answer questions that have not even been asked yet.



VALUES

INNOVATION

Whenever we find that even the best solution on the market is not good enough, we are eager to create a better one..

TALENT

In order to be the best, we hire the best – and we are continually developing our talent pool to maintain our leading position.

DIVERSITY

As a result of being present in many markets and industries we developed broad knowledge base and well founded operations. It means we are as diverse as our partners' needs.

RESPONSIBILITY

We always keep our partners' interests in mind and consider the environmental and social impacts of our actions under any circumstances.

PARTNERSHIP

Since collective success is unimaginable without collective thinking and work, we aim to build long-term partnerships.

Introduction

02

INTRODUCTION

The aim of this manual is to support users and applicators in correctly installing the **TROCELLEN** insulating products.

It provides information and practical tips based on the experience gained and on the knowledge of the materials involved, which can facilitate and simplify the installation of effective and long-lasting thermal insulation systems.

General instructions

03

Trocellen Insulating Products

3.1

Trocellen is a closed cell, cross-linked polyolefin resin foam specially developed to offer a number of advantages:

Exceptional performance in terms of constant thermal and acoustic insulation
With unique physical properties

Excellent barrier
Against the formation of condensation thanks to the closed-cell structure, which effectively prevents corrosion

Easy to clean

Easy to install
Due to its light weight, ease of cutting and absence of fibres

Self-adhesive
To make installation even easier

Ultra low smoke toxicity and opacity
In the event of fire

Safe, non-toxic, non-allergenic
Mould and bacteria resistant and reusable

TYPES OF PRODUCT

The range of **Trocellen** products for thermal-acoustic insulation includes various forms of supply, which facilitate its use in the relevant applications.

Trocellen is available in:



USED FOR

- Air ducts
- Large diameter pipes
- Coverings for large surfaces in general



USED FOR

- High thickness insulation
- Specially designed components



USED FOR

- Piping in general
- Ventilation ducts
- District heating terminals

Trocellen Accessories

3.2

SEALS



With thickness of 3-6 mm: for joining sheet metal elements (duct flanges, the edges of refrigeration cell doors and ventilation vents) to guarantee hermetic sealing and vibration damping.



MATIBLOCK® GLUE

SELF-ADHESIVE STRIPS



Rolls with reduced width to improve the technical finish of the insulation. They are suitable for insulating sections of the system where it is difficult to apply large insulating materials (e.g. flanges) as well as pipe joints.

Special glue for bonding non-adhesive sleeves, rolls and sheets, as well as adhesive sheets in conditions where the adhesive is not deemed sufficient to guarantee the seal or where it is not present (e.g. on cut edges).

SELF-ADHESIVE TAPES



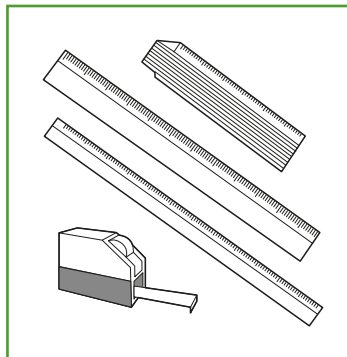
With thickness below 1 mm: used to guarantee a good aesthetic finish of the joints and to give continuity to the vapour barrier.



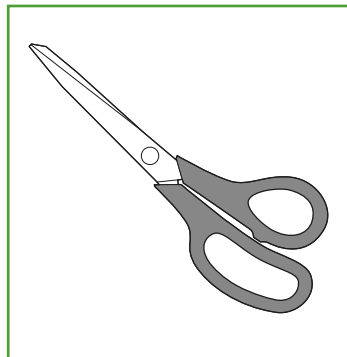
Installation Tools

3.3

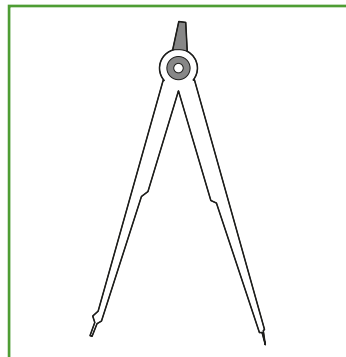
FOLDING/RIGID
RULER,TAPE MEASURE



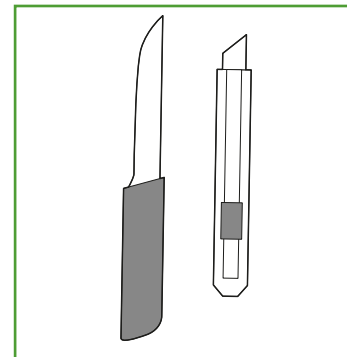
SCISSORS



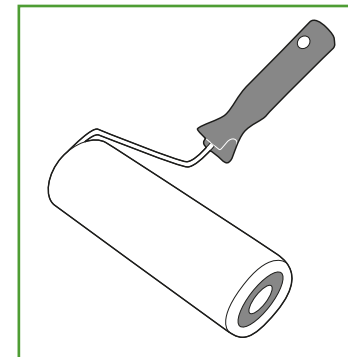
FIXED POINT COMPASSES



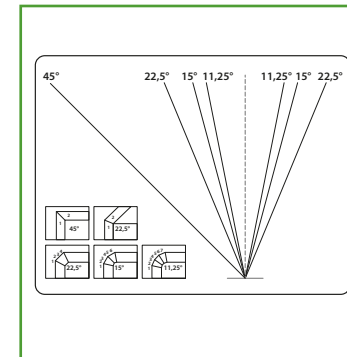
KNIVES AND CUTTERS



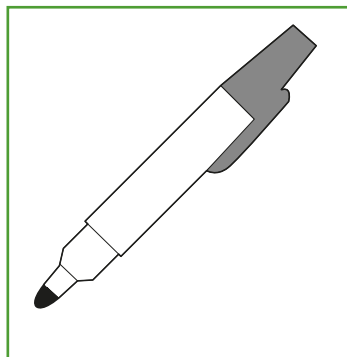
ROLLERS



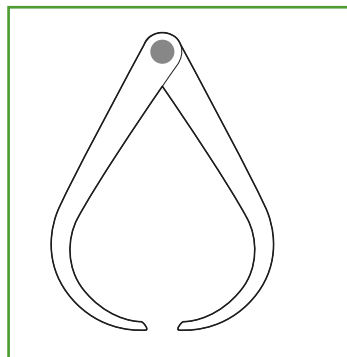
TEMPLATE (PRINTED ON
TROCELLEN SLEEVE BOXES)



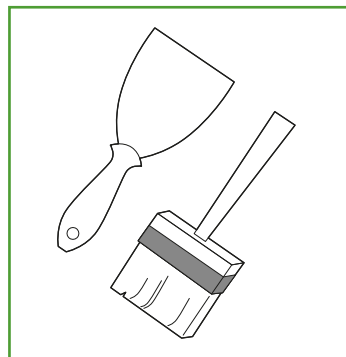
MARKER PEN



BOW CALIPERS



BRUSHES AND SPATULAS



Notes on how to install the insulation

3.4

1

Use perfectly sharp tools, fresh glue and a good brush.

2

Do not insulate systems and plants while they are in operation. Do not start the insulated systems until 48 hours after the insulation has been applied, in order to allow the adhesive to act completely.

3

Do not glue the insulation to sheets that are too cold (the ideal temperature is 20°).

4

The sheets must be clean and dry, without any traces of oil or dust. Do not use solvents for cleaning, it is preferable to use dry cloths. If this is not sufficient, use naked flame over the surface.

5

Do not stretch the insulation material during application.

6

When laying on rectangular ducts, the material must be cut to fit each section and not wrapped around the duct in order to avoid stretching with consequent formation of air gaps between the adhesive and the sheet, and a reduction in the thickness of the insulation on the edges.

7

Never pull at the edges to seal them, but always try to press them together.

8

When installing the insulation outdoors, always provide UV protection and use weather-tolerant adhesives to prevent the insulation from detaching.



Correct use of the Matiblock® Glue

3.4.1

1

Check the condition of the glue. Make sure the glue containers are stored indoors in a cool place (between +10 and +25°C). Failure to comply with these temperatures may impair the adhesive property of the glue during use (too hot) or make it too brittle (too low), leading to the risk of it peeling off after installation.

2

To prevent the glue from thickening too quickly and hardening, use small containers during the work and refill them from larger containers as needed, keeping the latter closed.

3

Mix the glue well after opening and before use.

4

Always follow the instructions given in the product safety datasheet.

5

The gluing should be carried out in well-ventilated areas, preferably with temperatures between 20°C and 30°C to speed up the evaporation of solvents.

6

The evaporation time is about 10 minutes. To check that the glue has dried properly, carry out a "nail test": the glue is ready when it no longer sticks to the nail forming threads.

7

Spread a layer of glue on both surfaces to be joined.

8

For flat surfaces, it is recommended to use 1 kg of glue per 2.5 - 3 sqm.

Instructions for installing Trocellen Ducts

04

Insulating Air Ducts

4.1

The function of air-conditioning systems is to guarantee a correct air exchange and to maintain an optimal temperature for the physical and mental well-being and comfort of people.

The ducts used for air distribution in building through ducts that must be properly insulated in order **to prevent heat loss/increase, with low energy consumption**, in accordance with the current legislation.

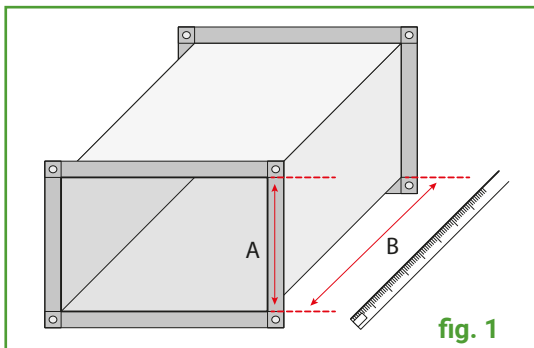
In addition to minimising the energy losses of the system, any formation of condensation on the air ducts for air conditioning must be prevented, and noise induced by pumps and/or fans must be reduced to a minimum.

The formation of condensation on the ducts must be avoided at all cost because, in addition to impairing the efficiency of the system, it can also create a perfect environment for the proliferation of mould and bacteria and damage the false ceilings due to the continuous dripping of water.

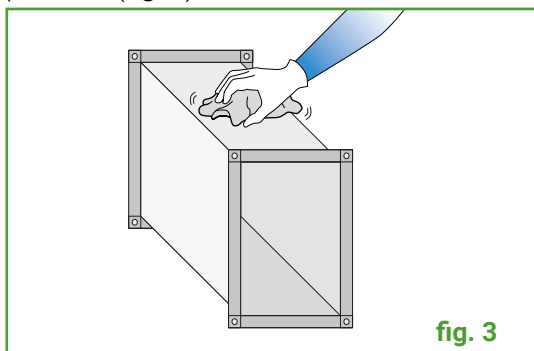
To design the perfect system requires calculating the minimum thickness of insulation needed to prevent the formation of condensation and to reduce energy losses in line with the legal requirements, taking into account the technical performance of the insulating materials according to the conditions of use.

Installing self-adhesive materials on Rectangular Ducts

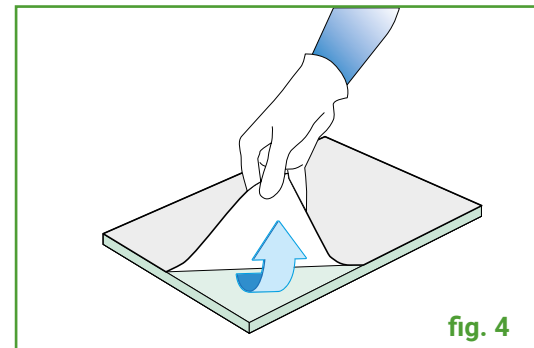
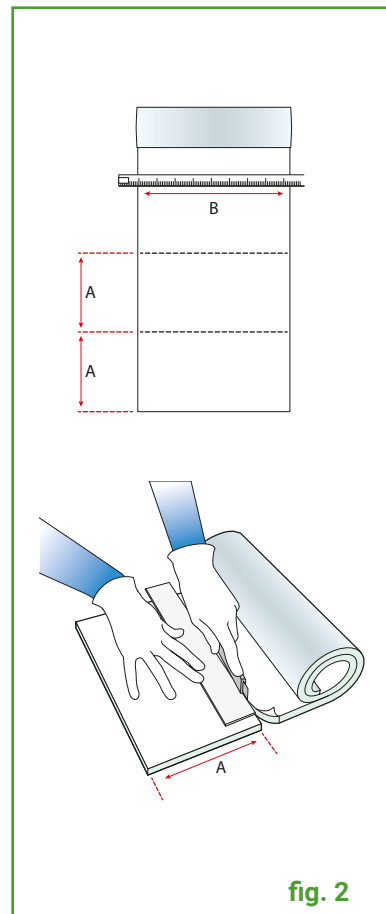
4.2



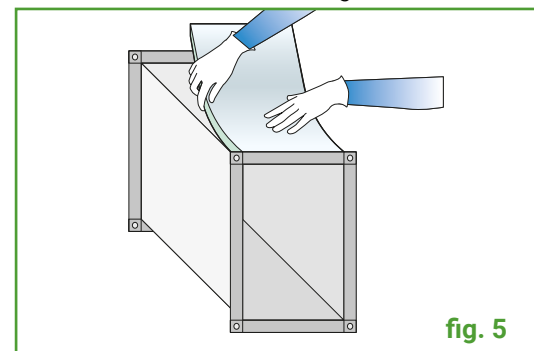
Measure the dimensions of one side of a duct section (**fig. 1**) and cut the **TROCELLEN** insulating material to obtain two equal portions. (**fig. 2**).



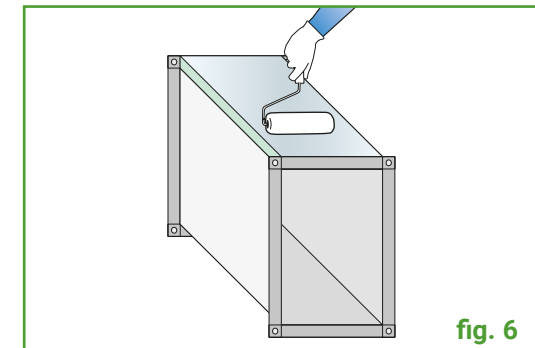
If possible, clean all external surfaces of the duct by the use of a naked flame over them in order to remove any traces of grease, oil, dust and other dirt. Make sure they are dry before applying the material. (**fig.3**).



Remove the first 20 cm of protective film (**fig. 4**) and align the material to the duct by positioning the bare side at the beginning of the duct, well below the flange.



Press firmly while removing the protective film and continue to align the material along the duct. (**fig. 5**).



The adhesive used is pressure-sensitive so an adequate and even pressure must be applied over the entire surface of the insulation. The actual pressure applied is not as important as the need to evenly distribute the pressure over the entire surface in order to prevent the formation of air bubbles. The best way to join the sheet metal with the insulation material is by calendaring, i.e. pressing the two layers with a roller (**fig. 6**). Repeat the operation on the opposite side of the duct.

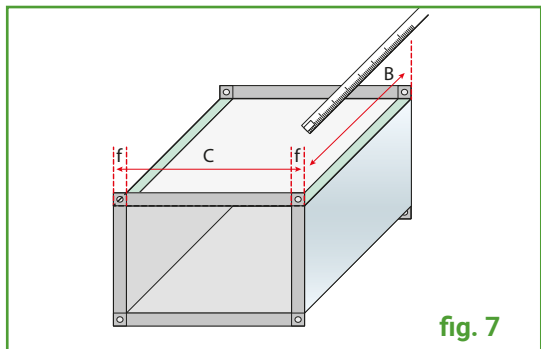


fig. 7

Measure the dimensions of the two remaining faces of the duct section, as well as the thickness of the material applied on both sides (**fig. 7**). Cut the Trocellen insulating material into two equal portions accordingly (**fig. 8**).

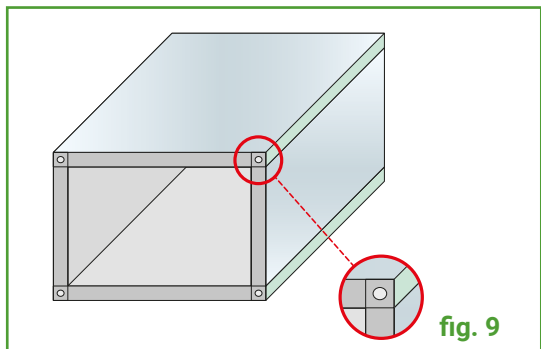


fig. 9

Apply the sheets on the duct using the same method described above. Make sure that the joint between the two sheets is at a 90-degree angle (**fig. 9**).

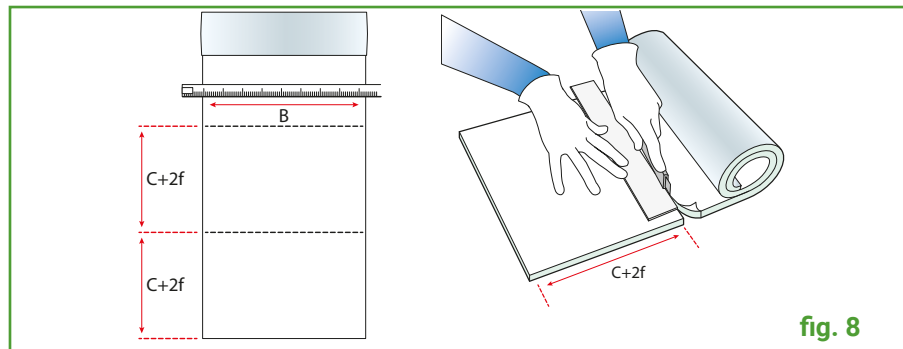


fig. 8

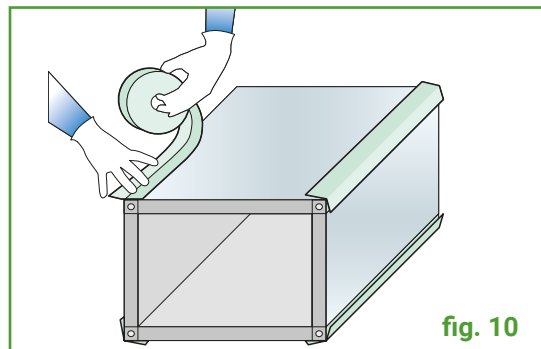


fig. 10

Finish the joints of the material with suitable adhesive tape with the same surface finish as the material installed (**fig. 10**). Use scissors or a knife to cut the tape to the required length. Do not pull or tear the tape. Apply an even pressure over the entire length of the tape to make it adhere properly once laid.

Installing non-adhesive materials on Rectangular Ducts

4.3

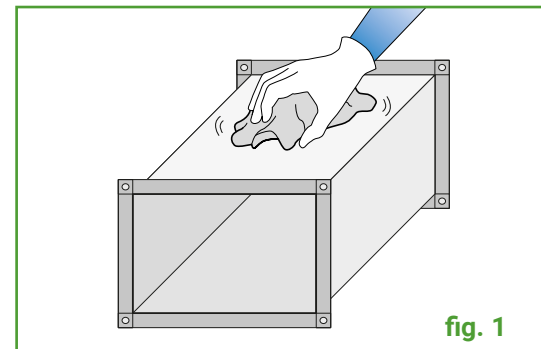


fig. 1

To measure and cut the material, proceed as for the adhesive material (see paragraph 4.2). If possible, clean all the external surfaces of the duct by the use of a naked flame over them to remove any traces of oil, dust and other dirt (**fig. 1**). Make sure they are dry before applying the material.

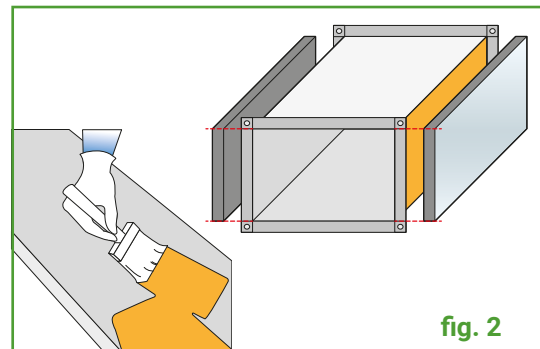


fig. 2

Mix the MATIBLOCK glue and spread a thin layer on the metal surface and on the first two portions of insulating material (**fig. 2**). Once the adhesive has dried (see correct use of MATIBLOCK glue), align the Trocellen insulating material and press firmly and evenly for good bonding.

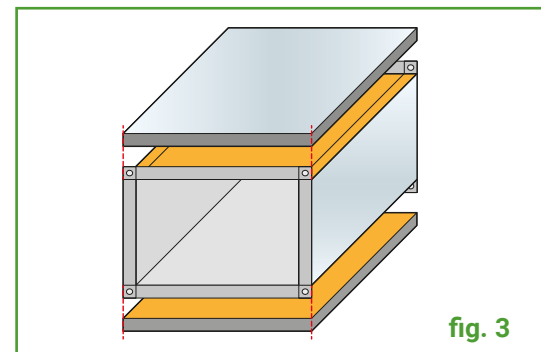


fig. 3

Continue in the same way on the other two surfaces (**fig. 3**), spreading the glue also on the edges of the material already laid and letting it dry before joining the sheets by pressing firmly in place.



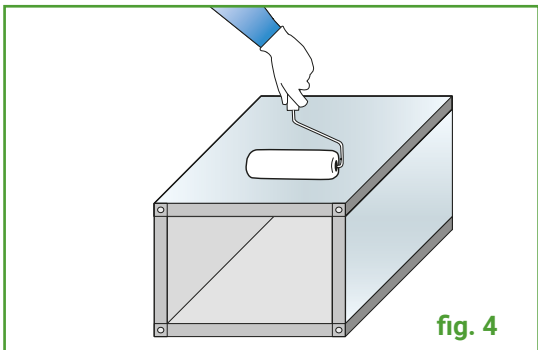


fig. 4

The best way to join the sheet metal with the insulation material is by calendering, i.e. pressing the two layers with a roller (**fig. 4**).

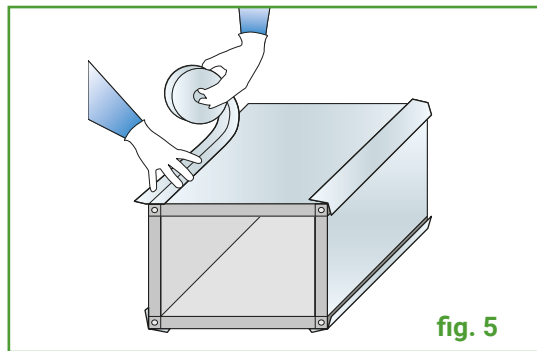


fig. 5

Finish the joints of the material with suitable adhesive tape with the same surface finish as the material installed (**fig. 5**).

Use scissors or a knife to cut the tape to the required length. Do not pull or tear the tape. Apply an even pressure over the entire length of the tape to make it adhere properly once laid.

Installing self-adhesive materials on Circular Ducts

4.4

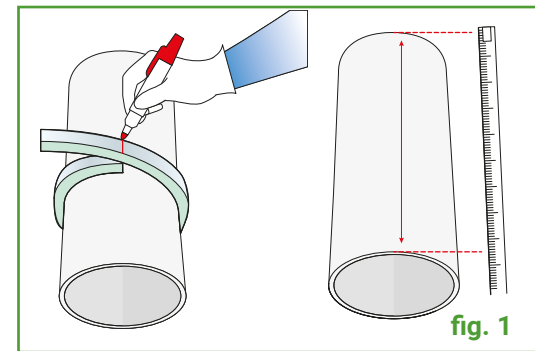


fig. 1

If the thickness of the material is 20 mm or less, proceed as follows:

- Measure the circumference of the duct with a Trocellen strip of known thickness, wrapping it around the duct without stretching. Mark it with a marker where the two edges overlap (**fig. 1**)
- Measure the length of the section of duct to be insulated
- Using these two measurements, trace and cut out the insulating material. (**fig. 2**)

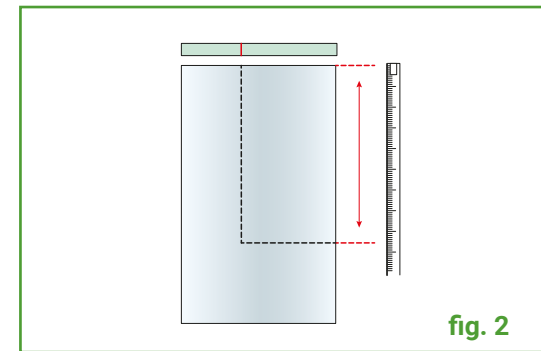


fig. 2

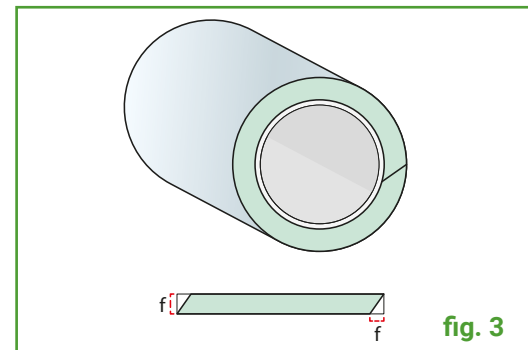


fig. 3

If the thickness of the material is more than 20 mm, it is recommended to cut the edges to be joined together at a 45-degree angle, in order to increase the adhesion surface (**fig. 3**). A measurement equal to the thickness of the material should therefore be added to the length measured using the strip method.



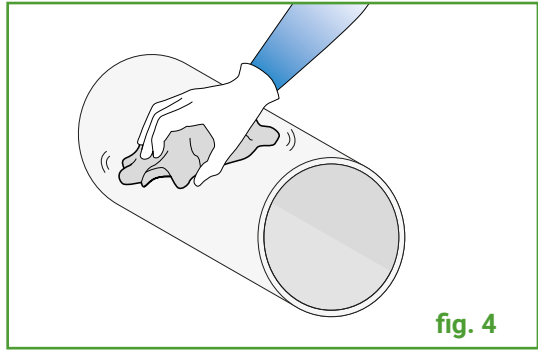


fig. 4

If possible, clean the surface of the duct by the use of a naked flame over it to remove any traces of grease, oil, dust and other dirt (**fig. 4**). Make sure it is dry before applying the material.

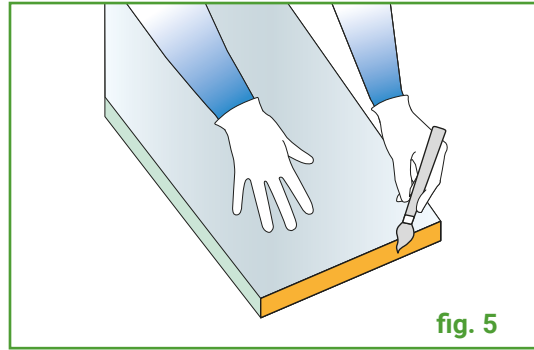


fig. 5

Mix the MATIBLOCK glue (see correct use of MATIBLOCK glue) and spread a thin layer on the two edges of the material to be joined together (**fig. 5**).

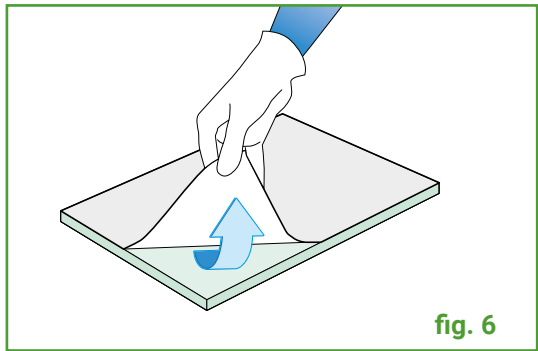


fig. 6

Remove all the protective film from the material (**fig. 6**).



fig. 7

Place the duct to be insulated and wrap the insulation around the duct until the two edges are joined (**fig. 7**).

The adhesive used is pressure-sensitive so an adequate and even pressure must be applied over the entire surface of the insulation. The actual pressure applied is not as important as the need to evenly distribute the pressure over the entire surface in order to prevent the formation of air bubbles.

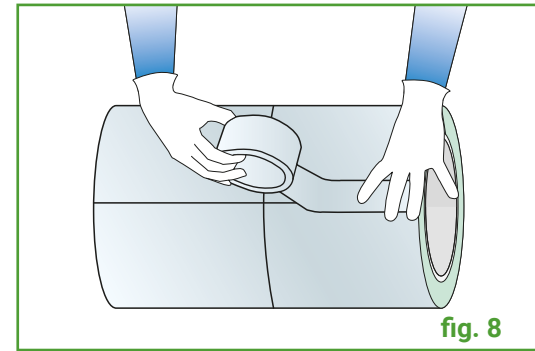


fig. 8

Join the two edges of material previously coated with the glue by pressing them together. Finish with suitable adhesive strips and tapes with the same surface finish as the material installed (**fig. 8**).

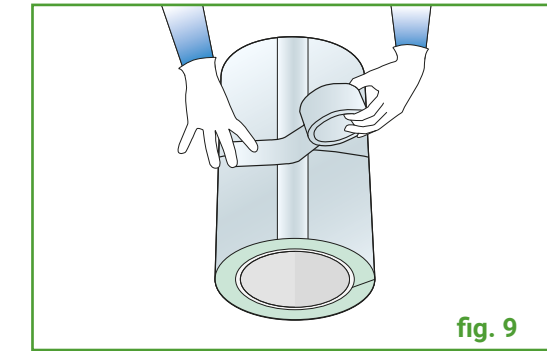


fig. 9

Use scissors or a knife to cut the tape to the required length. Do not pull or tear the tape. Apply an even pressure over the entire length of the tape to make it adhere properly once laid. Also apply strips and tapes in the transverse joints between consecutive parts of the insulating material (**fig. 9**).

Installing non-adhesive materials on Rectangular Ducts

4.5

To measure and cut the material, proceed as described in the previous section (section 4.4). For thicknesses of less than 20 mm, it is preferable to use self-adhesive material wherever possible.

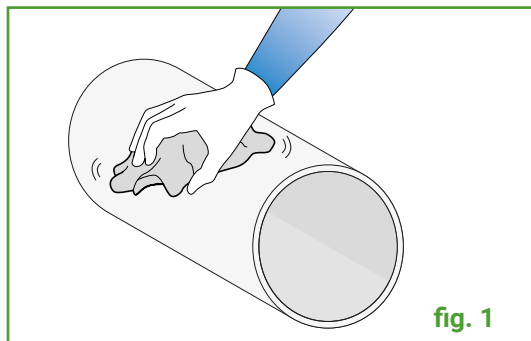


fig. 1

If possible, clean the surface of the duct by the use of a naked flame over it to remove any traces of grease, oil, dust and other dirt (**fig.1**). Make sure it is dry before applying the material.

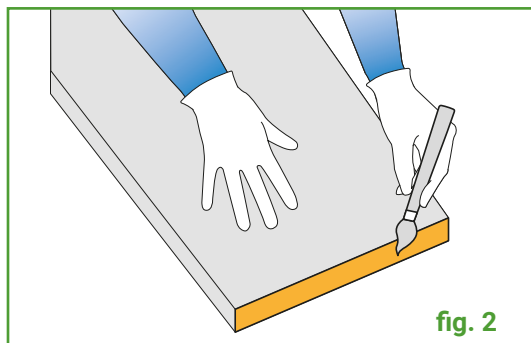


fig. 2

- Mix the MATIBLOCK glue (see correct use of MATIBLOCK glue) and apply a thin layer
- on the edges of the material to be joined together (**fig. 2**)
 - on a portion about 4-5 cm wide adjacent to the edge of the sheet, from the side that will be in contact with the duct, and on the same surface of the duct. (**fig. 3**)

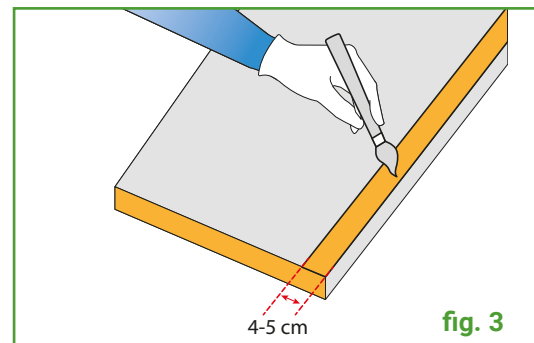


fig. 3

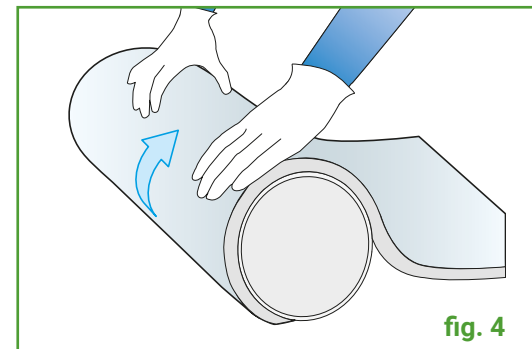


fig. 4

After the glue has dried, apply the insulating material to the duct, aligning the parts on which the adhesive was applied. Press firmly and evenly for good bonding. Wrap the material around the duct until the two edges previously coated with the glue join together. (**fig. 4**).

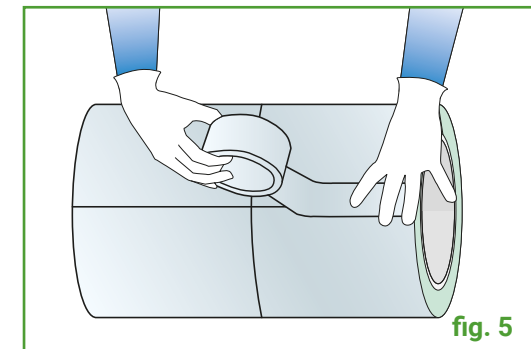


fig. 5

Join the two edges of material previously coated with the glue by pressing them together. Finish with suitable adhesive strips and tapes with the same surface finish as the material installed (**fig. 5**).

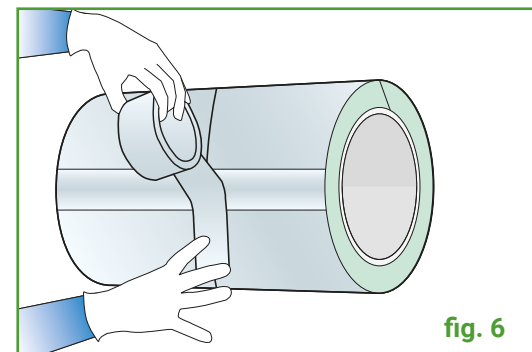


fig. 6

Use scissors or a knife to cut the tape to the required length. Do not pull or tear the tape. Apply an even pressure over the entire length of the tape to make it adhere properly once laid. Also apply strips and tapes in the joints between consecutive parts of the insulating material (**fig. 6**).

Installing multi-layer non-adhesive materials on Circular Ducts

4.6

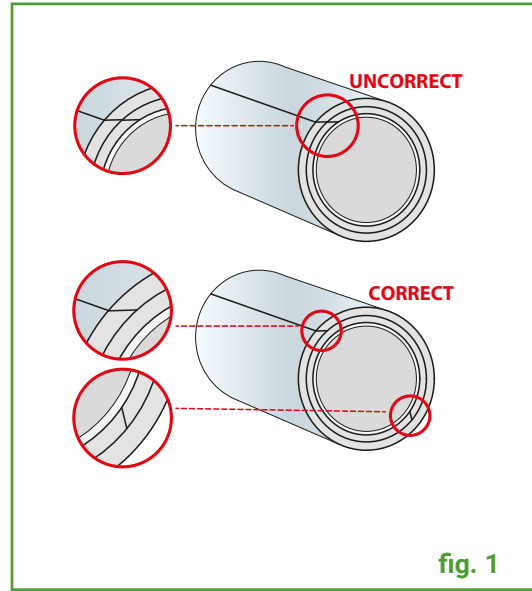


fig. 1

To create the first layer of insulation, proceed according to the instructions in section 4.5, and making an angle cut in the case of thicknesses greater than 20 mm. There is no need to apply the tape at the joints of the strips of the internal layer. After checking that the first layer has bonded properly, apply the top layer following the same methods. The glued joints should not overlap, but should be staggered as shown in **fig. 1**.

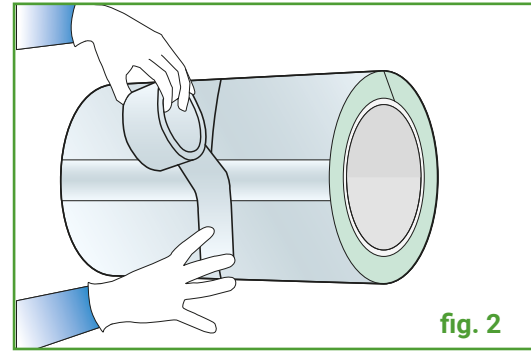


fig. 2

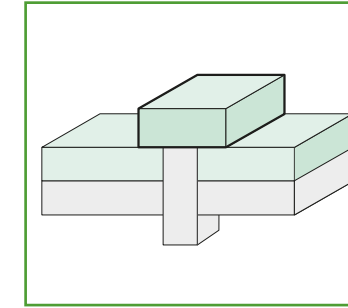
Finish the joint of the outermost layer with a suitable adhesive strip with the same surface finish as the material installed. Use scissors or a knife to cut the tape to the required length. Do not pull or tear the tape. Also apply strips and tapes in the joints between consecutive parts of the insulating material (**fig. 2**).



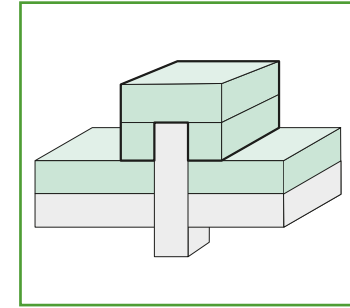
Insulating Flanges

4.4

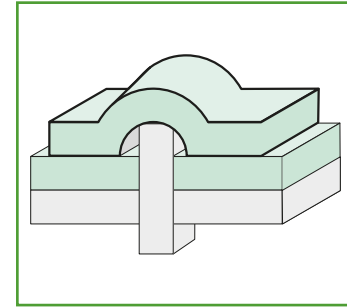
Insulate the flanges according to one of the following methods, applying adhesive strips having the same surface finish of the material installed.



Single strip method.
Four single strips applied on the insulating material.



Three-sided box method.
Vertical strips on the sides with covering strips.



Continuous single strip method.
Complete continuous single strip method.

Instructions for installing Trocellen Sleeves

05

Fitting the Sleeves

5.1

On systems under construction, sleeves are fitted on the pipes leaving uncovered only the sections that require seals or joints and that need to be inspected for water/air tightness.

On existing systems, cut the sleeves lengthwise, apply a thin layer of MATIBLOCK® glue on both surfaces to be glued (see correct use of MATIBLOCK® glue), wait a few minutes to allow the solvents to evaporate (both surfaces must be dry to the touch) and then press the two surfaces together until they are perfectly bonded.

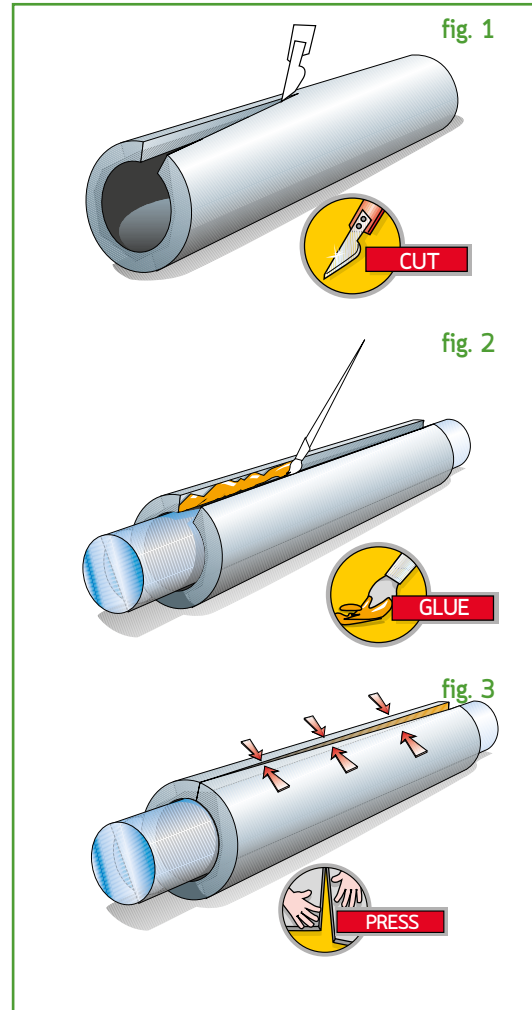
N.B. To cut down the time waiting for the solvents to dry, it is recommended to cut a couple of metres of sleeving at a time and then apply the glue.
FIRST insulate all the straight sections and then all the curves, T joints, etc.

5.1.1 NOTES FOR CUTTING

Use a sharp knife or retractable blade cutter. A new blade makes the cut easier and cleaner. If cutting is difficult, then it is necessary to sharpen the cutter blade or replace it with a new one.

Insulating Straight Sections

5.2



TROCELLEN INSTALLATION GUIDE

- 1) Cut the insulating sleeve lengthwise along its entire length. (**fig 1**)
- 2) Clean the surface of the pipe to be insulated using a naked flame over it to remove any traces of grease, oil, dust and other dirt. Make sure it is dry before applying the material.
- 3) Place the cut sleeve on the pipe.
- 4) Spread the MATIBLOCK glue evenly over the two cut edges (**fig 2**)
- 5) Wait until the glue is dry, and then join the two edges by pressing them against each other evenly, making sure they are firmly bonded together. (**fig 3**)
- 6) For additional safety, it is possible to apply adhesive tape with the same finish as the sleeve on the lengthwise joint.

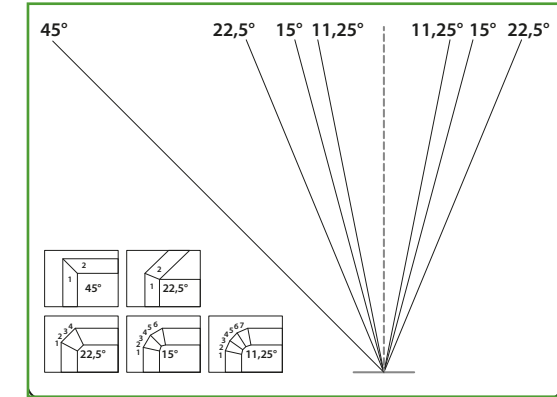


Insulating Curved Sections and T-Shaped Joints

5.3

5.3.1 USING THE TROCELLEN TEMPLATE

To make it easier to insulate curves and T-joints, each box of TROCELLEN sleeves contains a template to facilitate cutting the sleeves at different angles.



For correct use of the template (see figure):

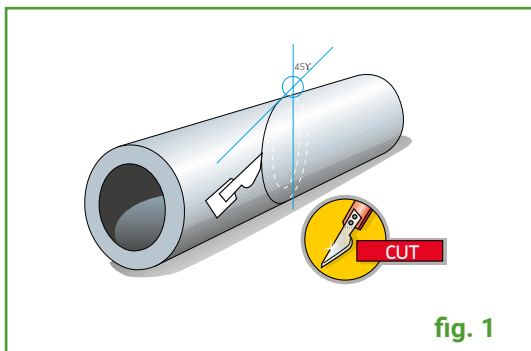
- 1 Place a copy of the TROCELLEN template with the drawn part facing upwards on a table or workbench.
- 2 Align the TROCELLEN sleeve on the template parallel to the horizontal baseline.
- 3 Choose the desired cutting angle from the template and cut along this line.

TROCELLEN INSTALLATION GUIDE

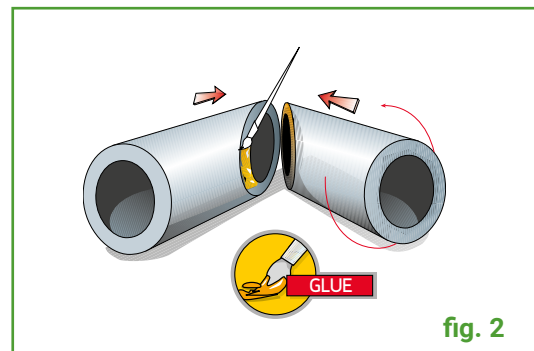
Insulating Elbow Joints

5.3.2

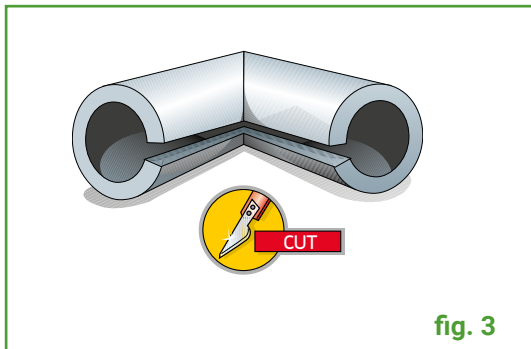
Straight pipes with a smaller diameter are joined by inserting the linear insulating pipe into the TROCELLEN elbow joint, mounted with the appropriate dimensions.



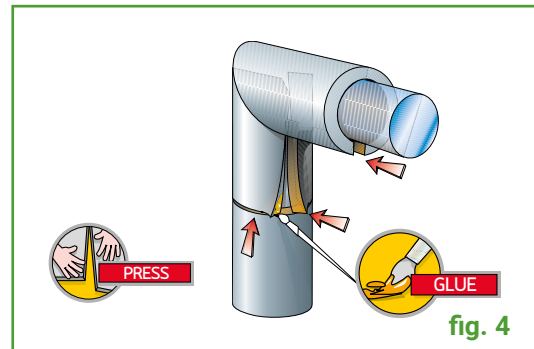
Cut the insulating sleeve crosswise at a 45-degree angle, using the template as a guide. (fig 1)



Rotate one of the two parts and glue them at a right angle. (fig 2)



Cut lengthwise along the inner side (fig 3)



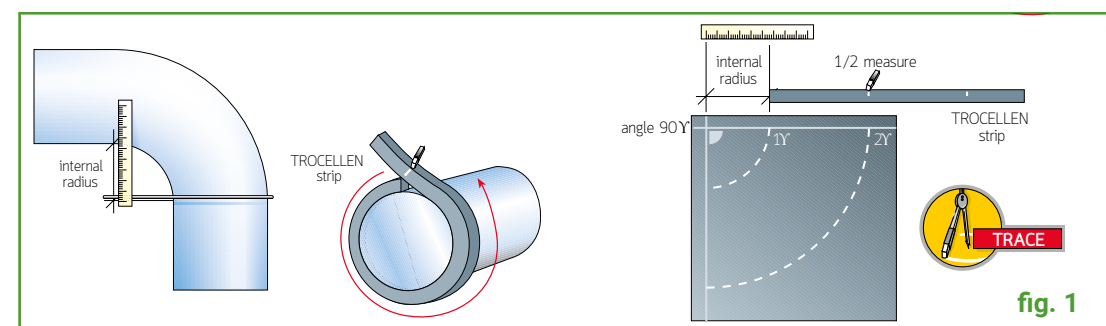
Cover the elbow joint with the piece obtained, glue the cut edges by pressing them to make them adhere well and to fit with other straight sections of the same diameter (fig 4)



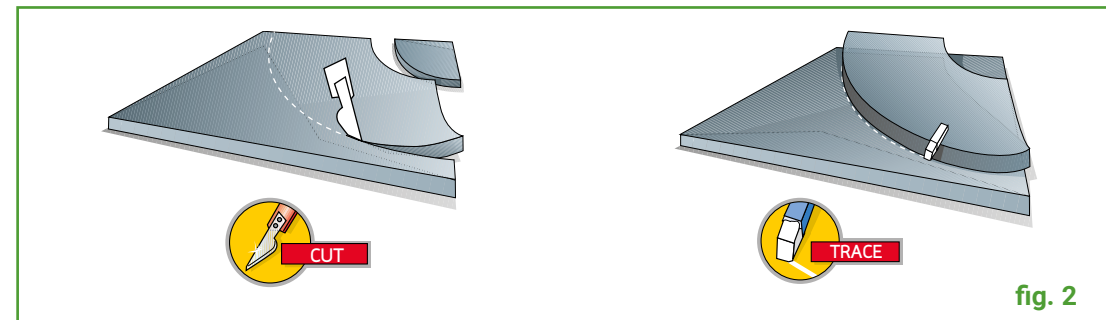
Insulating Curved Pipes

5.3.3

To insulate curved pipes with sheets of insulating material, trace the geometric shape of the curve onto a sheet of TROCELLEN material.



1) Using a rod and a rigid ruler placed at a right angle to each other, calculate the internal radius of the curve and, using a TROCELLEN strip of known thickness, measure the circumference of the pipe (do not pull the strip when wrapping it around the pipe to be insulated). (fig 1)



2) Cut the first shape along the marked lines, which will be used as a template for tracing the second shape and any other subsequent ones. (fig 2)

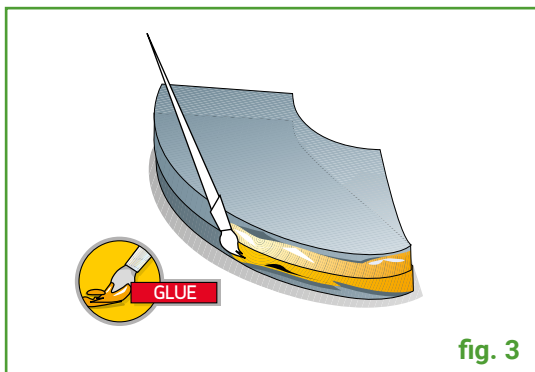


fig. 3

3) Lay the two sections flat on top of each other and spread MATIBLOCK glue on the edges of the profile with the larger radius. (fig 3)

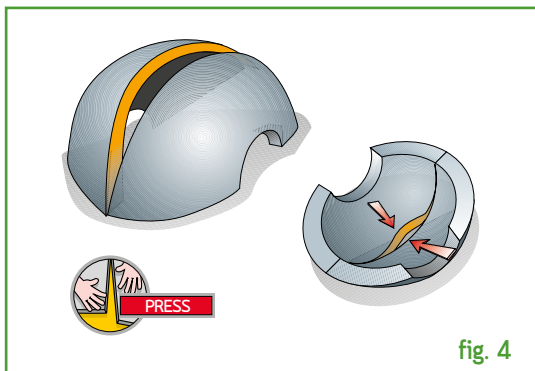


fig. 4

4) Once the glue has dried, join the two flat sections, start gluing from the ends, making sure that the join is also perfect on the other side. (fig 4)

38

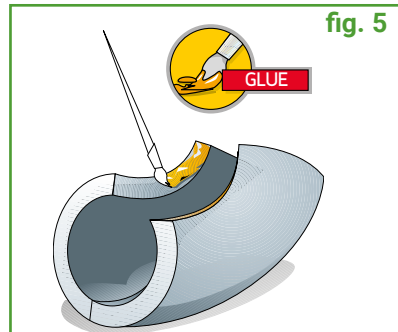


fig. 5

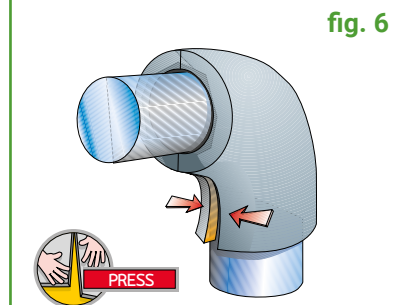


fig. 6

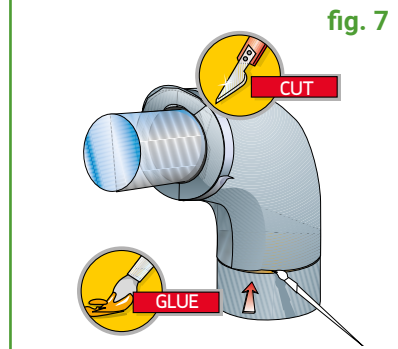


fig. 7

TROCELLEN INSTALLATION GUIDE

- 5) Apply glue to the edges and let it dry (fig 5)
- 6) Fit the insulating material obtained to the curved section of the pipe, joining the inside edges by pressing them together (fig 6)
- 7) Using a metal tape as a guide, cut the two edges at a right angle, so that they match the adjacent insulating sections. (fig 7)

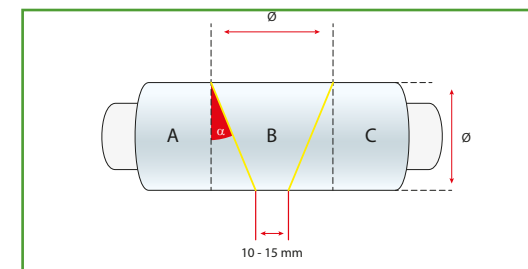


Other ways to insulate Curved Sections

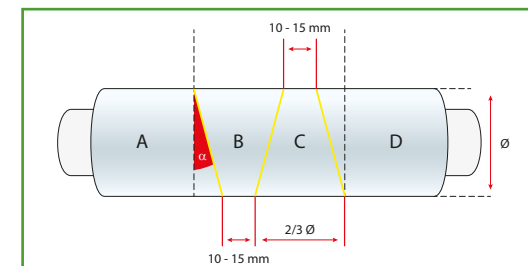
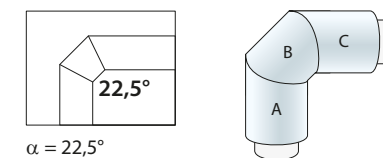
5.3.4

A curved section can be created by cutting a TROCELLEN sleeve into segments and assembling them together.

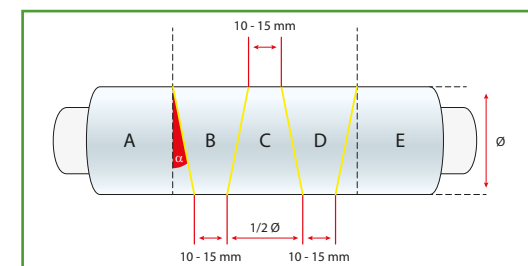
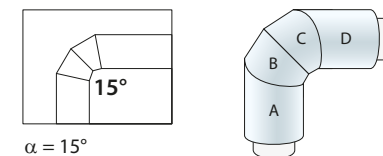
Depending on the number of segments, follow the instructions below to choose the correct cutting angle and correct distance between one cut and the next:



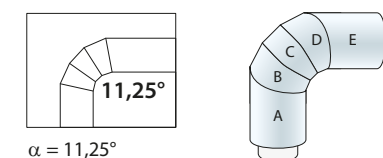
Segmented curve with 1 central part



Segmented curve with 2 central parts



Segmented curve with 3 central parts



TROCELLEN INSTALLATION GUIDE

39

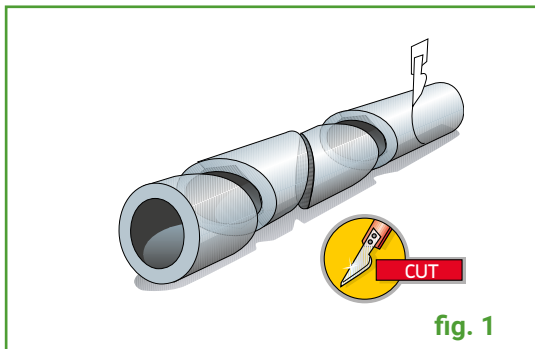


fig. 1

Using the cutting template, cut the insulating sleeve into one or three segments, following the instructions indicated above. (fig 1)

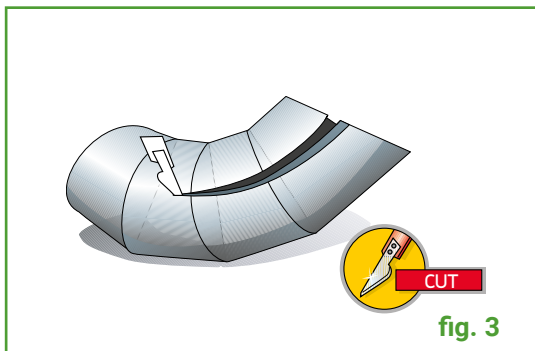


fig. 3

Cut lengthwise down the section in order to fit the material onto the curved pipe and then glue (fig 3).

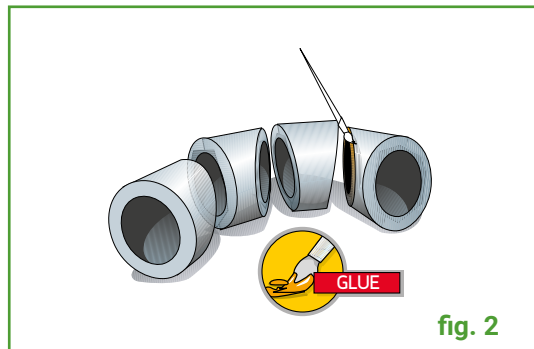


fig. 2

Combine the segments obtained and glue them together to form the desired curve (fig 2)



Insulating “T” Joints

5.3.5

A. WITH 45° CUT

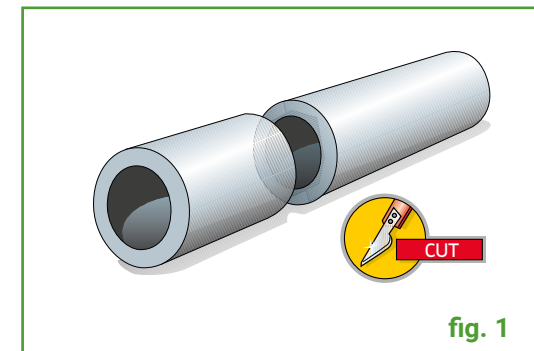


fig. 1

Cut the insulating sleeve crosswise, so that the pieces are 1/3 and 2/3 of the total length. (fig 1)

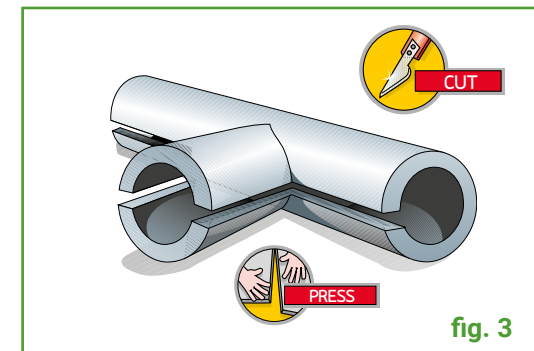


fig. 3

Assemble the two parts to obtain a T-joint. Cut the material lengthwise in order to allow assembly. (fig 3)

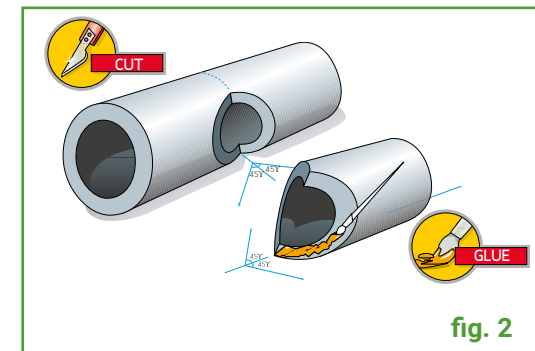


fig. 2

Midway along the longest section, make two 45-degree cuts converging towards the inside. Make another 45-degree cut at one end of the shortest section and apply glue on the cut edges (fig 2)

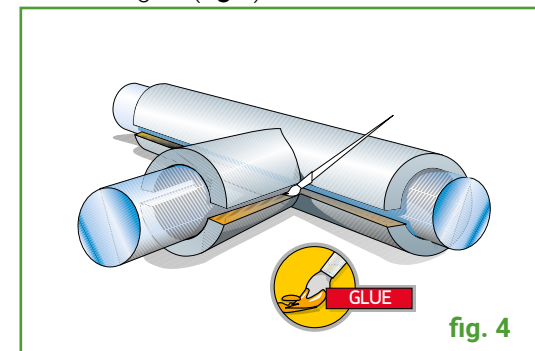
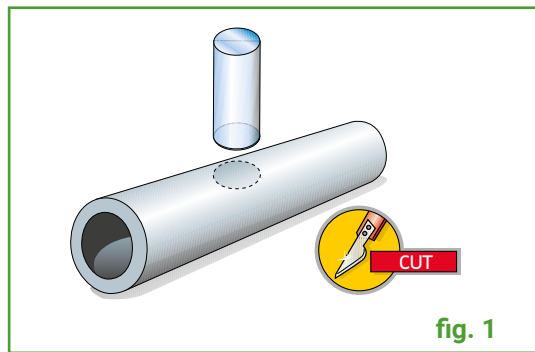


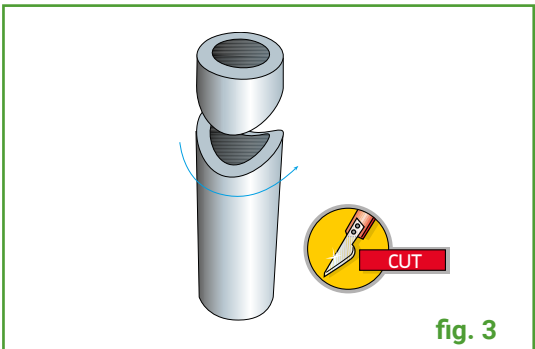
fig. 4

Apply the glue on the cut edges and join them. (fig 4)

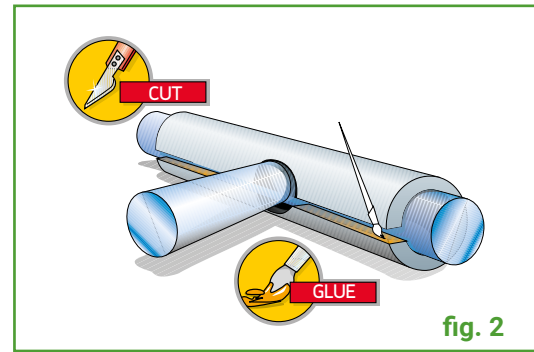
B. WITH HOLE PUNCH



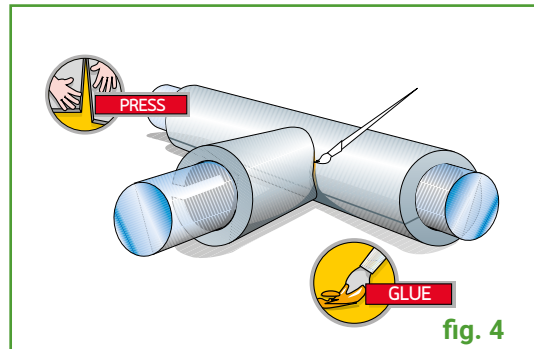
Make a hole in the insulating sleeve using a tube with a sharpened rim (**fig 1**)



Make a rounded cut at the end of a sleeve to create the correct shape that can fit into the sleeve with the hole (**fig 3**)



Cut the sleeve lengthwise and fit it on the pipe. Spread glue on the cut edges and glue together (**fig 2**)

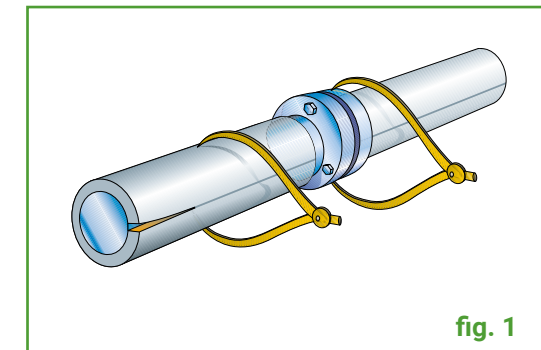


Spread glue on the ends to be joined and then press them together firmly to create the "T" joint. (**fig 4**)

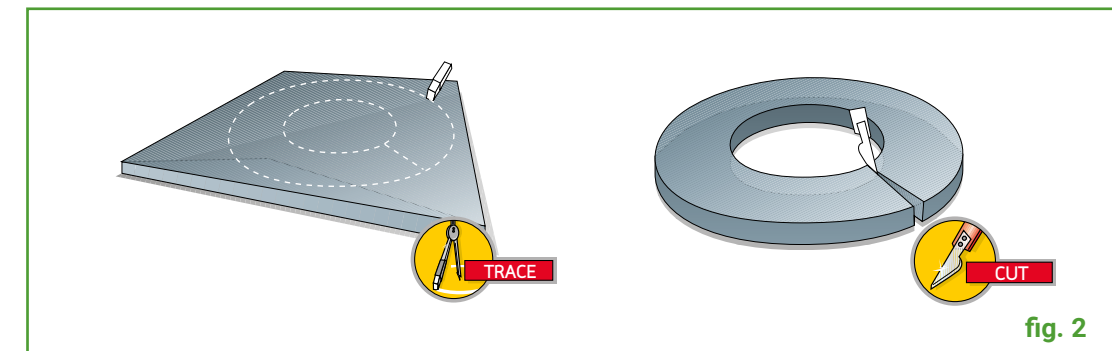
Insulating Flanges

5.4

Insulating a flange with flat sheets is not complicated, but care is needed when cutting the two rings of the TROCELLEN material.



Insulate the two pipe sections up to the flange. Measure the diameter of the flange and the insulated pipe. (**fig 1**)



Use a compass to **trace** two concentric circles with equal diameter on the sheet, one corresponding to the diameter of the flange and one to the pipe. Cut out the ring obtained with a blade.

Cut out an opening to fit the pipe (**fig 2**).



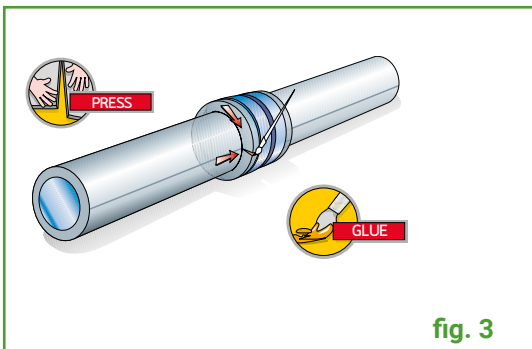


fig. 3

After applying the MATIBLOCK glue at necessary points of the insulation and flange, glue the rings of insulation materials to the side of the flanges. **(fig 3)**

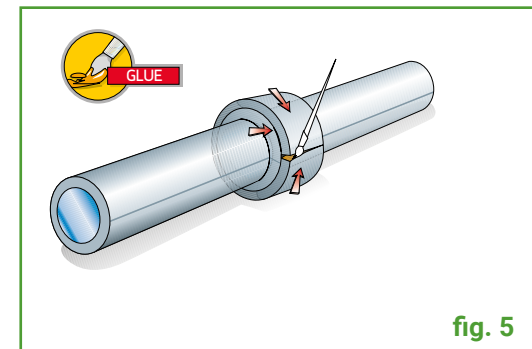


fig. 5

The strip obtained in this way can then be fitted around the flange, after accurately spreading glue on the points of contact with the two previously fitted rings. **(fig 5)**

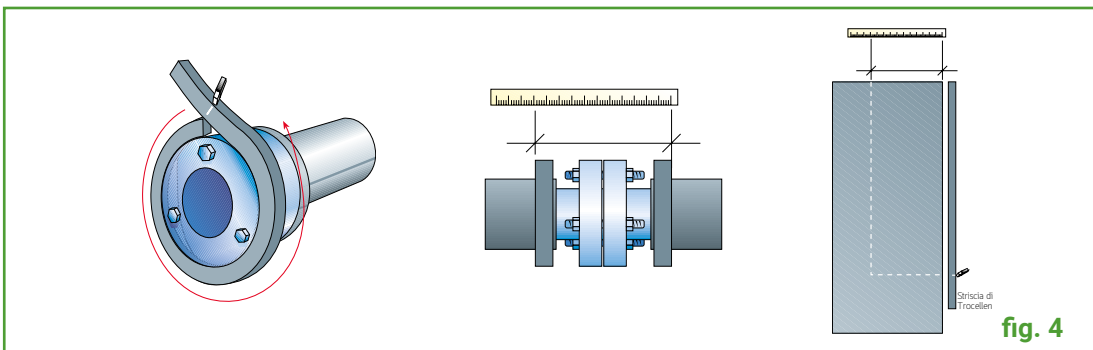


fig. 4

Using a TROCELLEN strip of the same thickness, measure the circumference of the two fitted rings and then the distance between them, including the thickness of the insulation material. Using these measurements, trace and cut out the shape on a TROCELLEN sheet in order to cover the top of the flange. **(fig 4)**



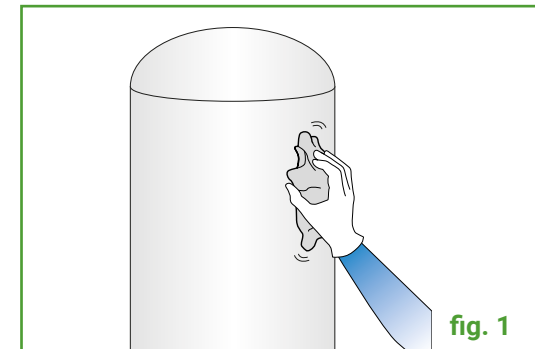
Instructions for insulating Silos and Tanks

06

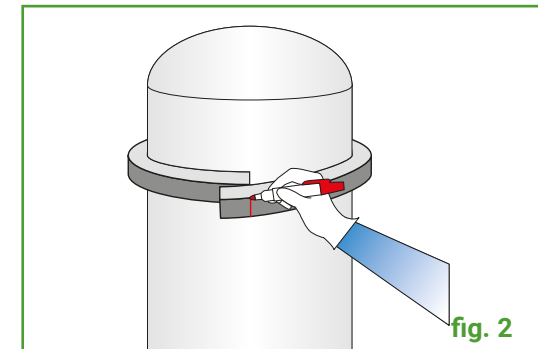


Insulating Silos and Tanks with Trocellen Rolls

5.4

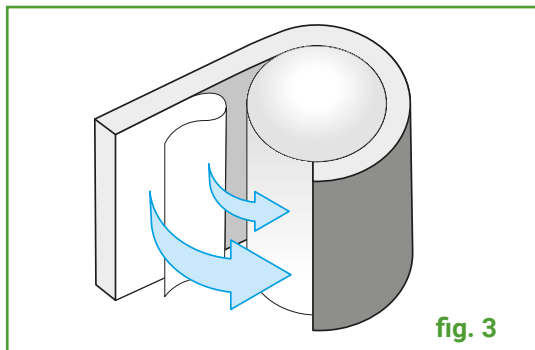


Before installing the insulation material, the tank must be clean. If possible, use naked flame over the outer surfaces to remove any traces of grease, oil, dust and other dirt. **(fig. 1)**



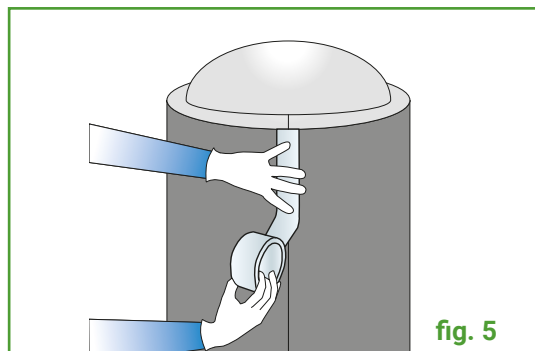
Measure the cylindrical part of the tank. For the measurements, use a strip of insulating material of the same thickness as the one to be applied and refer to the instructions on how to install insulation on circular ducts. **(fig. 2)**

Cut the required portion of Trocellen material and apply the material as follows:

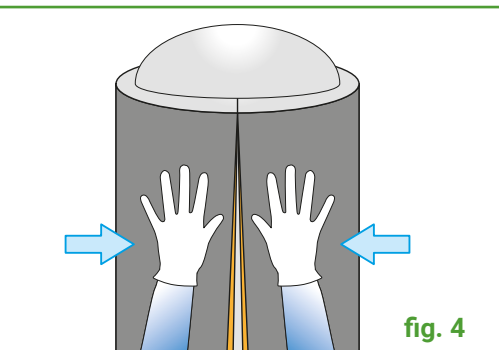


Self-adhesive insulating material

Fix the starting point and glue gradually while removing the protective film of the adhesive. Apply an even pressure over the entire surface. In addition, follow the instructions given for the circular ducts in the previous chapters (**fig. 3**).



48



Non-adhesive insulating material

Follow the gluing operations described in the previous section of circular ducts. For both versions, apply Matiblock glue to the edges of the material to be joined together. (**fig. 4**)

After application, tape the joint between the two edges with aluminium tape or self-adhesive strips (**fig. 5**).

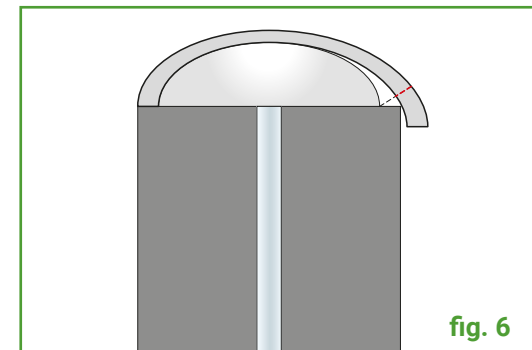


fig. 6

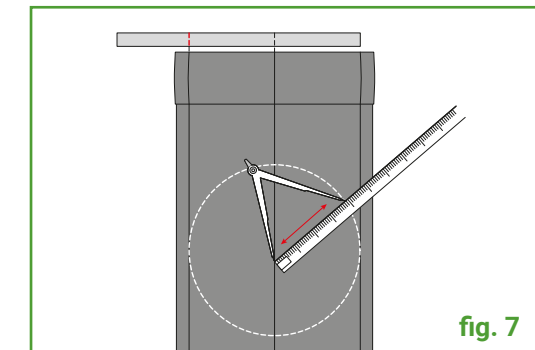


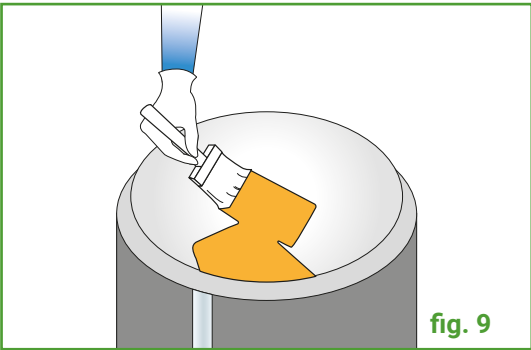
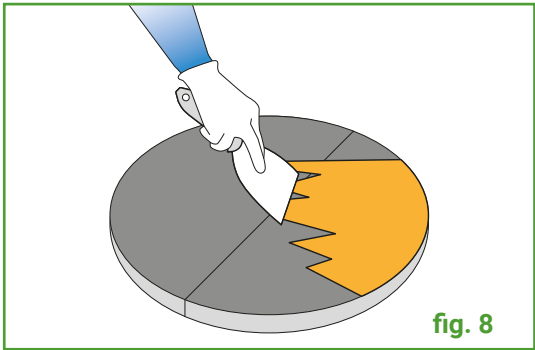
fig. 7

Continue applying the insulation on the top part of the tank (cap). First, measure the line of the upper profile of the cap: this line coincides with the diameter of the circumference of the insulating material to be applied (**fig. 6 and fig. 7**)

49

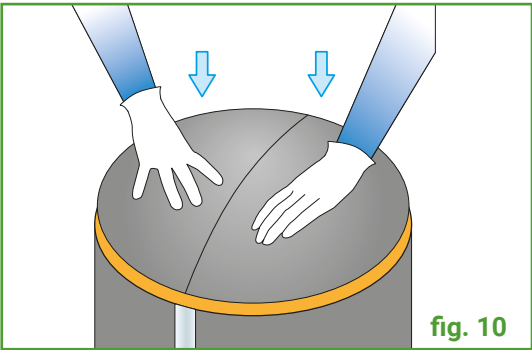
Apply the circumference obtained on the cap of the tank as follows:

Non-adhesive insulating material



Apply Matiblock glue both on the insulating material and on the metal surface (refer to the section “Correct use of Matiblock Glue”) (**fig. 8, 9**).

Self-adhesive insulating material



Remove the protective film of the adhesive and apply the product. Apply an even pressure to facilitate bonding. Once the material has been applied to the cap, apply the Matiblock glue to the edges of the insulating material to allow it to join with the material glued to the cylindrical surface (**fig. 10**). Then tape this joint with aluminium tape or self-adhesive strips.

If more than one layer of material is required, refer to the procedure described in the section on how to install multi-layer insulation on circular ducts.



INTERNATIONAL LOCATIONS

Lead Plant

TROCELLEN Italia S.p.A.

Sales office
Via Dante, 3
20867 Caponago (MB), Italy
Ph. +39 02 959 621
Fax +39 02 959 62 235

TROCELLEN S.E.A. Sdn Bhd

Lot 2213, Kg. Batu 9 Kebun Baru,
Jalan Kasawari
42500 Telok Panglima Garang
Selangor Darul Ehsan, Malaysia
Ph. +60 3 3122 1213
Fax +60 3 3122 1211

Polifoam Plastic Processing Co. Ltd

Táblás u. 32
1097 Budapest, Hungary
Ph. +36 1 347 98 00
Fax +36 1 280 67 08

TROCELLEN Ibérica S.A.

C/Avila, s/n
28804 Alcalá de Henares, Spain
Ph. +34 91 885 55 00
Fax +34 91 885 55 01

TROCELLEN GmbH

Mülheimer Straße 26
53840 Troisdorf, Germany
Ph. +49 2241 2549000
Fax +49 2241 2549099

TROCELLEN France

Bureau de vente
2 rue de Commères,
Immeuble les Peupliers
F-78310 Coignères, France
Ph. +33 (0) 130 85 93 40

insulation@trocellen.com

Trocellen GmbH

Troisdorf - Germany

Polifoam - Trocellen Group

Budapest Dabas Dunaharaszti - Hungary

Trocellen Italy

Caponago, Volpago Italy

Trocellen SEA

Telok Panglima Garang - Malaysia

Trocellen Iberica

Alcala de Henares - Spain

TROCELLEN*

Trocellen is a multinational company owned by Furukawa Electric Co. Ltd, internationally renowned for the design and manufacture of cross-linked polyolefin foam.

Through its different Business Units, the company is able to meet the specific needs of the market with a wide range of products and solutions. It manufactures both semi-finished and finished products. The Trocellen products stand out for their manufacturing processes and the many industrial sectors in which they can be used: Insulation, automotive, footwear, sport and leisure, adhesive tapes and packaging. Trocellen makes safety a lifestyle and turns safety into a lifestyle.

Insulation Business Unit

The Insulation Business Unit mainly specialises in Sound and Thermal insulation for the building industry. The goal is to create comfortable environments for people or rather to "help people live better!".

*Trocellen is a member of the Furukawa Group



**FOLLOW US ON
TWITTER**



**CONTACT US ON
LINKEDIN**



**DOWNLOAD TROCELLEN APP
FROM THE WEBSITE**

www.trocellen.com