

Chimneys, stoves and ventilation
solutions designed for life.



SCHIEDEL

Installation Instructions

**Instructions for installation, use and maintenance
of Schiedel chimney systems that connect to solid
fuel combustion appliances.**

Version 1.0

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1. Introduction

This document contains instructions for installation, operation and maintenance. Read the installation and assembly instructions prior to installation. The installer is responsible for proper installation.

On Schiedel's website you will find all systems. Here, in addition to an overview of the technical characteristics of each flue system, you will find drawings, construction examples, a drag calculator and various practical downloads. Installation instructions for the prefabricated ISO-block transit system are attached as an appendix to this file.

This document is based on Dutch regulations for installation, use and maintenance. Please consult local regulations in other countries.

2. Technical applications and regulations

2.1 Scope

These installation instructions are to be applied to Schiedel solid fuel chimney systems. Technical data and areas of application can be found on the Schiedel website.

2.2 Certification and performance statement

All Schiedel systems have a CE mark. A DoP (Declaration of Performance) shows how a product performs under defined conditions. As of July 1, 2013 a DoP is mandatory for suppliers to the construction industry. The DoP can be found per Schiedel system on the website under downloads → certification. An explanation of a designation as shown on the DoP is shown below.

Example of an AT designation:
T600 N1 D V3 L50040 G50

Temperature rating:	T600
Printing class: (N = negative pressure and P = positive pressure)	N1
Condensate Resistance: (D = dry and W = wet)	D
Corrosion class:	V3
Material Specification:	L50040
Chimney fire safe: (G = yes and O = no)	G
Distance flue To combustible materials in mm:	50

Wat betekent de
corrosieklasse precies?

V1: Laagste corrosiebestendigheid. Deze producten zijn geschikt voor minder agressieve omgevingen, bijvoorbeeld binnenshuis, op plaatsen met een gematigd klimaat en zonder blootstelling aan agressieve stoffen of hoge luchtvochtigheid.

V2: Middelmattige corrosiebestendigheid. Deze producten zijn geschikt voor omgevingen die meer corrosieve omstandigheden vertonen, zoals gematigde industriële omgevingen of buitengebruik in een klimaat met enige luchtvochtigheid of verontreiniging.

V3: Hoge corrosiebestendigheid. Deze producten zijn ontworpen om te presteren in agressieve omgevingen, zoals in zware industriële omgevingen, kustgebieden met zoutnevel, of in gebieden met een hoge luchtvochtigheid of sterke luchtvervuiling.

2.3 European and Dutch Standards

It is necessary to ensure the quality of the installation and meet all requirements. The NEN, Stichting Koninklijk Nederlands Normalisatie Instituut, has standards related to flue gas ducts. From July 1, 2013, under the European Construction Products Regulation (305/2011/EU), also known as CPR (Construction Products Regulation), it is mandatory for manufacturers to apply CE marking to all construction products covered by a harmonized European standard.

In the Netherlands, buildings must comply with the Building Works Decree for the Living Environment (Bbl), formerly the Building Decree, since January 1, 2024. This document summarizes what this means for manufacturers and importers of flue systems that sell products on the Dutch market. The following European standards apply to metal chimneys:

NEN-EN 1856-1:2009 Products for system chimneys. NEN-EN 1856-2:2009 Metal liners and connecting pipes.
NEN-EN 1859:2009 + A1:2013 Metal chimneys - Test methods.

In addition to the European standards, the following standards apply in the Netherlands:
NEN 2757:2019 Methods for determining the suitability of flue gas discharge systems for building-related installations.
NEN 6062:2017 Determination of fire safety of flue gas exhaust systems.

2.3.1 Make available performance statement

Under the Construction Products Regulation (305/2011/EU), the manufacturer is required to make available a Declaration of Performance. This declaration of performance, also called Declaration of Performance (DoP), states, among other things, the following:

- Manufacturer's product and address information;
- Building product performance;
- Intended uses and CE marking.

2.3.2 Explanation in Dutch practice guidelines

The information as contained in the applicable standards is explained through a practical approach in Dutch Practice Guidelines (NPR). Two main NPRs are available for flue gas ducts:

- NPR 2758 Code of practice for flue gas extraction and combustion air supply.
- Guide to NEN 2757-1 and NEN 6062
- NPR 2759 Code of practice for in-situ flue gas evacuation of combustion appliances regardless of fuel type. Guideline for NEN 2757-1, NEN 2757-2 and NEN 6062.

Dutch standards have additional requirements to European requirements. An important additional requirement, in the NEN 6062 is that the distance to combustible materials 0 mm is guaranteed: Distance to Combustibles (DtC). Sections 3.2.2 and 3.2.3 combustible and non-combustible construction penetrations show how the DtC of 0 mm can be guaranteed.

A new measurement tool for the energy performance of new homes was introduced on Jan. 1, 2021. This measurement tool is called BENG and stands for nearly energy-neutral buildings. Every new construction home is required to perform a BENG calculation. The building envelope is included in the calculation of the BENG value. This makes not only the installation of insulation in the walls, roofs, floor and ceiling increasingly important, but also energy conservation. The placement of a heating appliance with associated flue directly affects this.

3.0 Installation

3.1 Preliminary work

Ensure an unobstructed supply of ventilation and combustion air, preferably directly from outside. Draft is avoided by placing the air supply openings as close as possible to the unit. This prevents underpressure and thus flue gas leakage into the house. Avoid underpressure from home ventilation and exhaust hoods.

Before starting the installation, the intended route, location of ravelings, recesses in walls, floors, roof and any obstacles such as beams, purlins, etc. are measured. The recess in non-combustible materials must be 20 mm larger than the external diameter of the flue. When tracing, account must be taken of drag, the dilution factor and the outlet.

3.1.1 Verslepingen

A vertical chimney as straight as possible guarantees the best draught. Versions should be avoided if possible. A horizontal duct section, outside of a connection piece for the appliance, is prohibited. Schiedel has a range of 15°, 30° and 45° bends.

Recommendation is made not to drag an angle more than 45°. If this does become necessary, it is recommended that a chimney calculation be performed. Contact Schiedel's technical helpdesk in case of more than one drag. To make the bends stress-free, a fitting pipe (sliding pipe) can be used to bridge any residual dimension between 100 and 300 mm, see Figure 1. The insulation blanket should be removed along the length L. Slide the fitting pipe over section A. After assembly, secure the fitting pipe by tightening the clamping band.

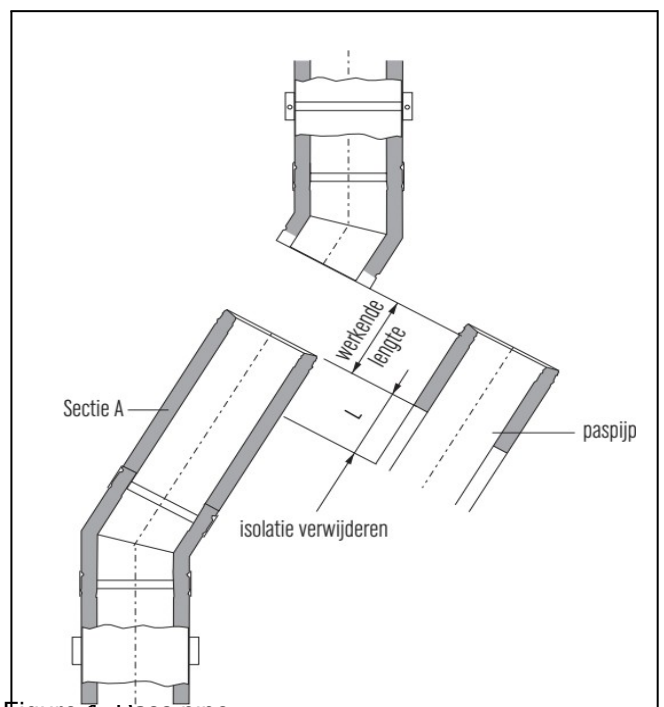


Figure 1, Pass pipe

3.1.2 Choice diameter flue

The flue diameter is determined by the appliance manufacturer. Once the flue diameter is smaller than the appliance connection, it will have to meet the requirements of EN 13384-1 (Single systems), and EN 13384-2 (Multiple systems). The diameter is determined by several factors:

- The total length including connecting line
- The course of the flue gas duct
- The capacity of the heating device
- The type of furnace
- Type of fuel

Too large a diameter can lead to poor draft or even smoke recoil. The flue gases then cool too quickly and cause fouling. Too small a diameter results in poor draft. A flue that is too short (less than 3 meters) can result in smoke not being able to be carried with the wind (especially when fall winds occur). The draft is reduced by a bend, because of this drag should be avoided as much as possible.

- See section 3.1.1 Verslepingen.

3.2 Construction, Structures, Feedthroughs & Outlet

SECURITY NOTICE

Personal protective equipment (PPE) is recommended for assembly.

3.2.1 Construction

The flue pipe should be constructed from the bottom up. The correct orientation and assembly of the elements can be found on Schiedel's website. Improper installation of a chimney component can result in poor draft. Connect the appliance with a connector from Schiedel. All sections and any bends can be fitted to this. At least for each first bend and subsequent bend, an attachment to the building structure should be made.

After determining the components to be used, the center line of the route is marked on the walls, and the location of the fasteners is determined according to the table of mounting heights. Each system has different mounting heights and distances. Suitable mounting heights and distances for the desired system can be found on Schiedel's website. The outside of a flue can become flammably hot, therefore consideration must be given to any necessary casing and distance from combustible material.

For larger free mounting heights, static clamping bands can be used. Choose the length and location of the sections so that the connection between two elements and clamp or cover tape is not at the location of a penetration. The connection must not coincide with fastening and sealing fittings to ensure trouble-free installation.

If it is not permitted by the appliance manufacturer to rest the duct on the appliance, the weight of the flue system must be supported by independent supports. Use Schiedel fasteners for this purpose. The weight of the flue can be supported by means of:

- The floor using a base support plate
- From the wall with a wall bracket
- From the second floor with a support plate - Clamp attached to the floor or ceiling joists
- When attaching brackets and supports, always use the correct diameter bolts or screws to match the diameter of the hole in the bracket.

3.2.2 Combustible construction penetration

A fire-resistant perimeter collar should be installed at combustible penetrations. The ducting should pass through floors and roof structures to run. The distance of the air cavity depends on the DtC, this information can be found in the DoP. A DtC of 0 mm can be ensured by means of a casing or ISO-block. The fire-resistant casing should be a material with fire class A-1. In addition to serving a fire-resistant function, the encasement also serves as touch protection. Below are examples of penetrations of combustible structures. (Figures 2 through 7)

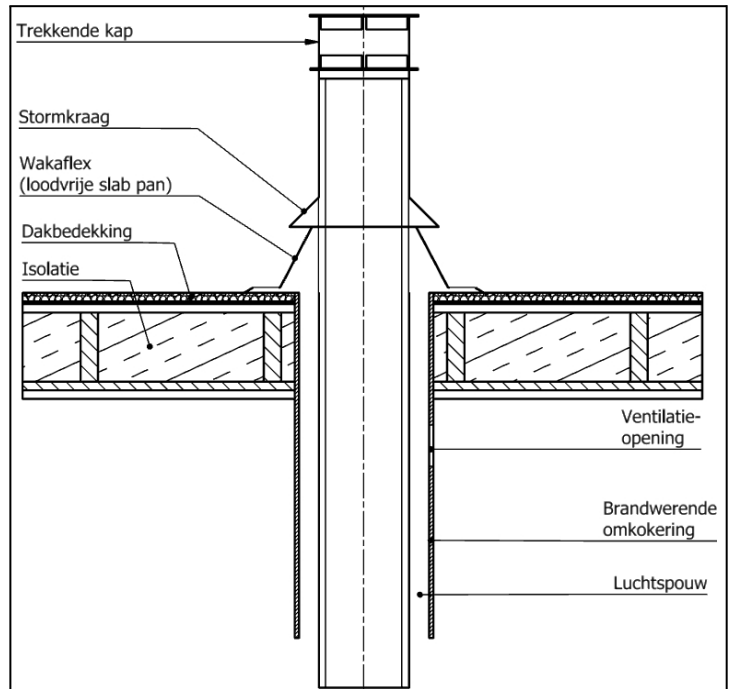
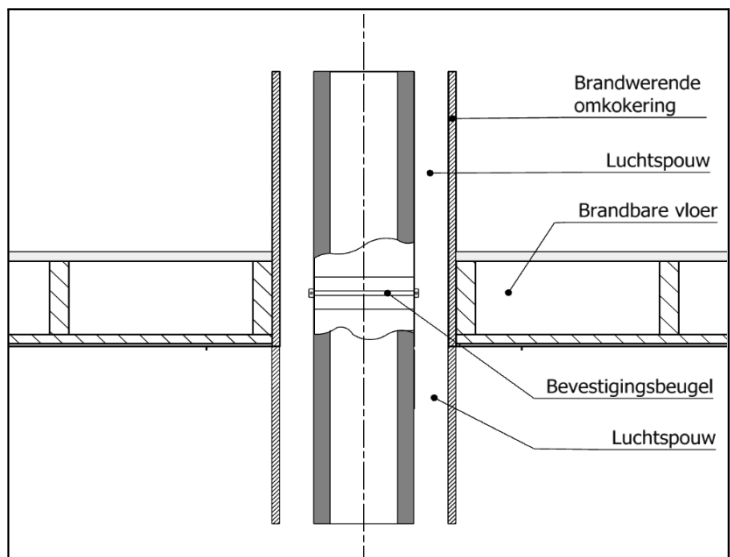


Figure 2, Ceiling penetration (combustible ceiling)

Ventilation openings with annex ventilation grilles should be placed in the casing. This is to ensure that the temperature does not rise too high in the casing. The space between the duct and casing must be free for ventilation. Remove any insulation; the ventilation space must not be filled. Insulation in the ventilation space can lead to heat congestion. For combustible penetrations, natural ventilation is sufficient. If in doubt, contact our technical help desk.



The recess in the constructions shall comply with the performance declaration derived from NEN 1856-1. The recess in combustible structures shall have the same dimensions as the outer materials of the flue system. Each Schiedel flue system has a declared value of distance from combustible materials according to NEN 6062 (October 2011). As specified on the DOP of the Schiedel system.

A wall outlet is not allowed in the case of a flue gas outlet of a combustion appliance for solid fuels, such as a pellet stove or wood stove according to NEN 2757.

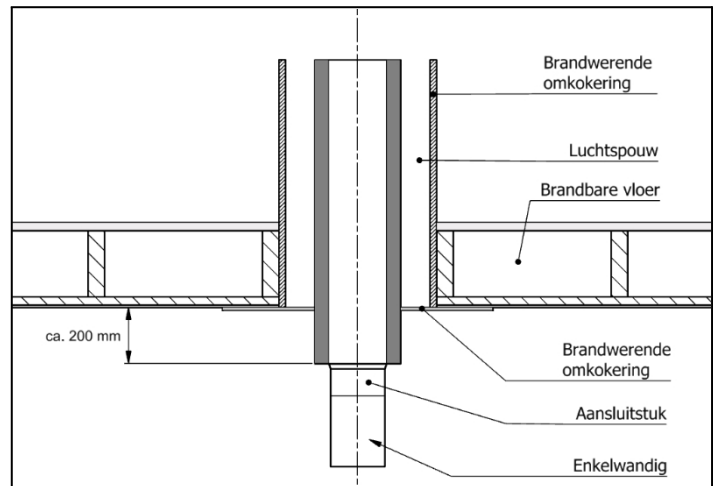


Figure 4, Ceiling connection (combustible floor)

For a fire-safe penetration, the ISO block can be used. For floor and roof penetrations, an ISO block can be placed as a substitute for the non-combustible duct. The ISO block is placed at the height of every combustible wall, floor or roof. The non-combustible duct runs from and up to the ISO block.

- For detailed instruction, refer to the Appendix Assembly Manual ISO Block.

All tiled roofs are combustible structures. For a tiled roof, the roof is finished with a Wakaflex lead-free slab pan and a storm collar. The fixing plates of the roof support are adjustable in pitch. For insulated roofs, remove insulation on site. Extend the fire protection collar through the roof boarding.

- See 2.2.5 finishes

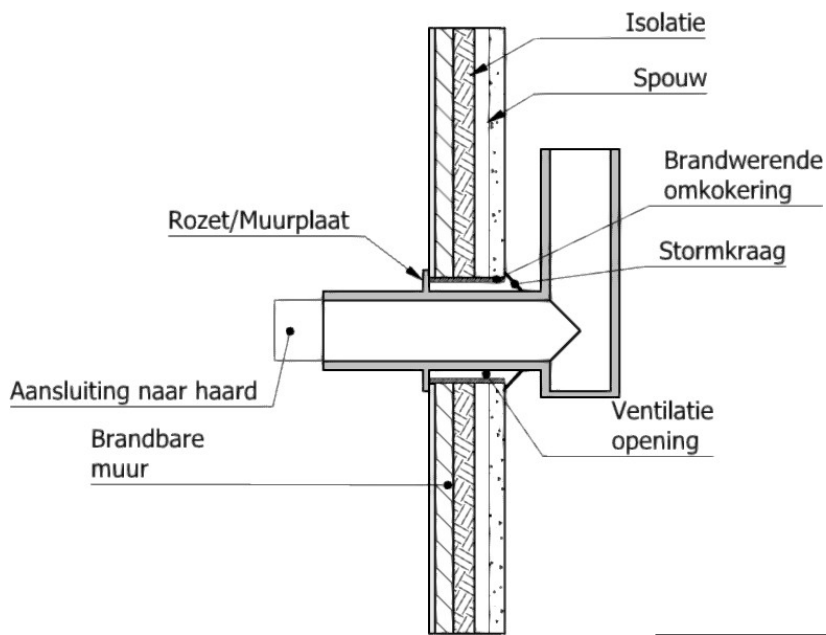


Figure 5, Wall penetration (combustible wall)

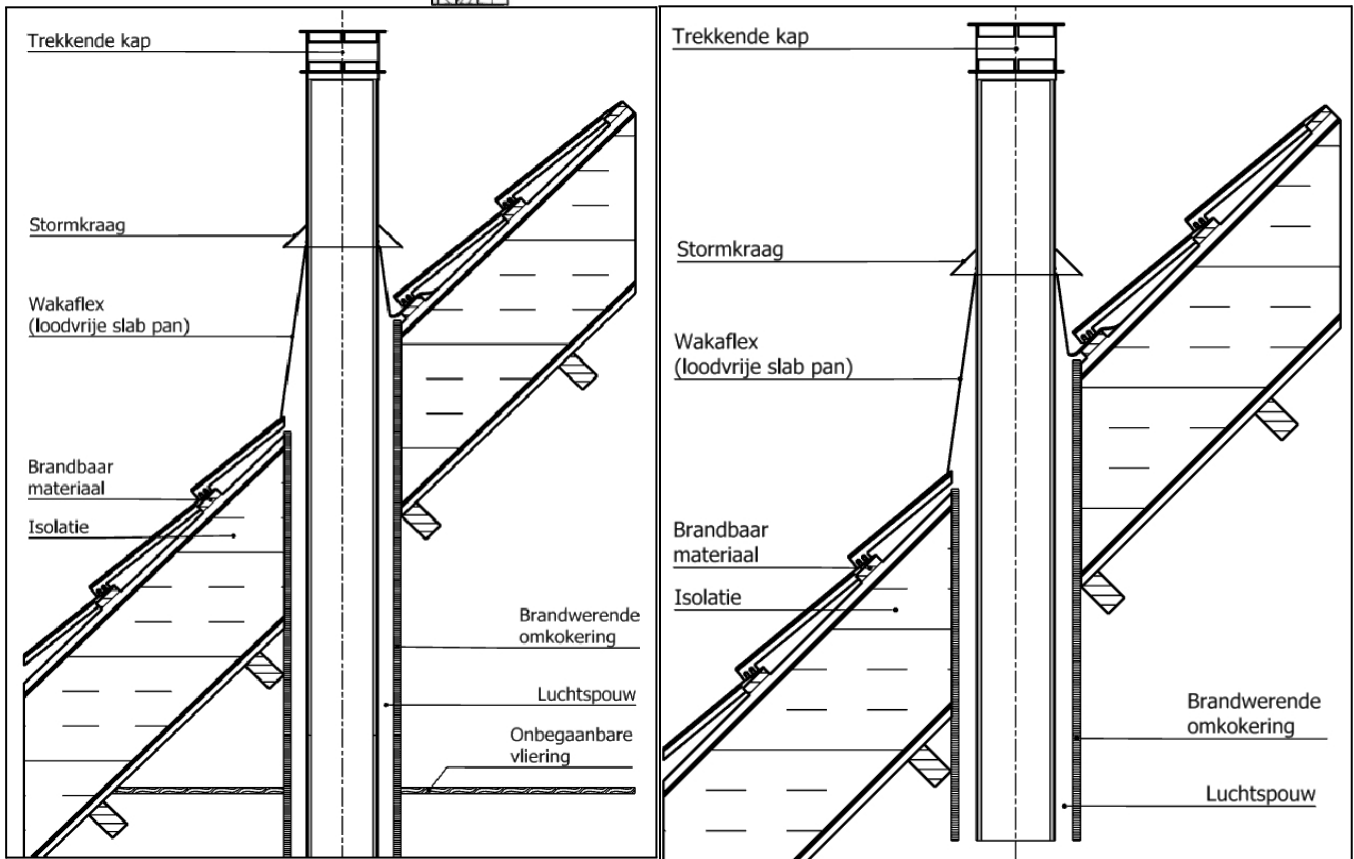


Figure 6, Roof penetration combustible pitched roof pitched roof (impassable loft)

Figure 7, Roof penetration combustible pitched roof (passable loft)

3.2.3 Non-combustible construction

The encasement does not need to be placed on a non-combustible floor or roof construction. Noncombustible construction is often made of concrete. Get permission from a structural engineer to drill into the concrete. A surround should be placed between structures. As shown in Figures 8 and 10, the distance of the cavity is the same size as the outside diameter of the casing. The distance of the air cavity depends on the DtC. The material used for the casing should be

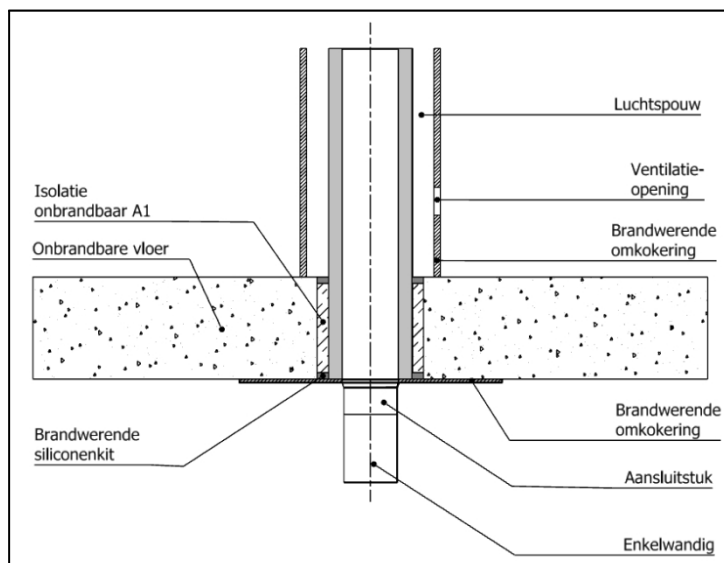


Figure 8, Ceiling connection (non-combustible ceiling)

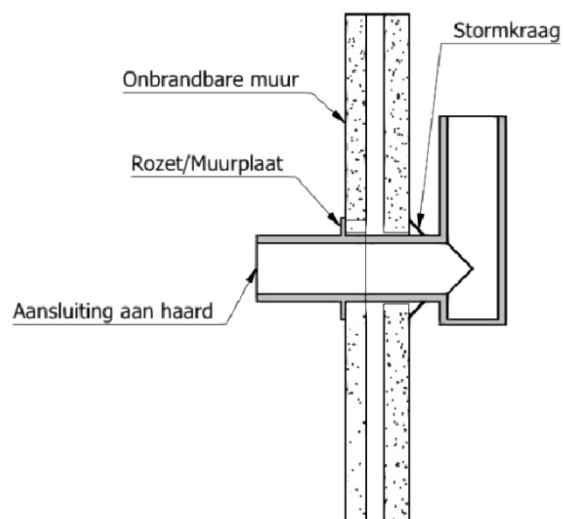


Figure 9, Wall penetration (non-combustible wall)

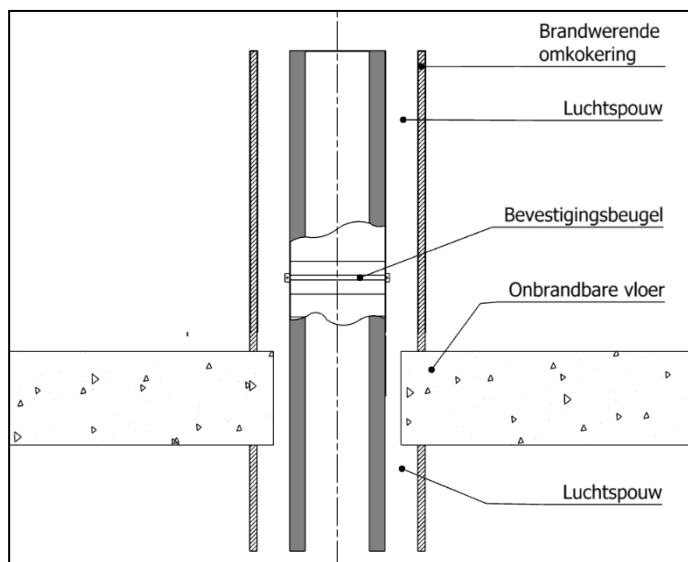


Figure 10, Ceiling penetration (non-combustible ceiling)

3.2.4 ISO-block precast transit system for stainless steel chimneys

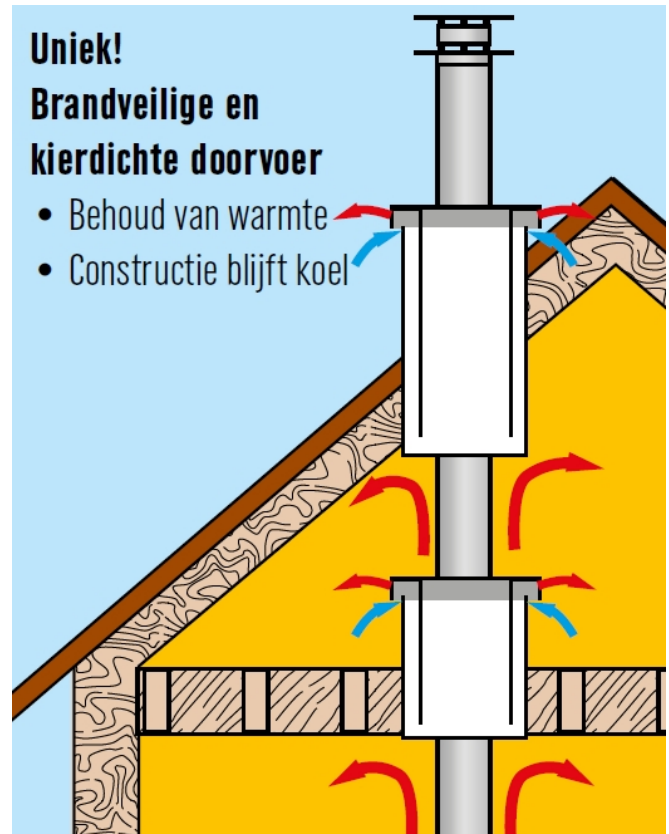
The ISO-block makes it possible to provide an airtight finish to the house when the flue gas duct is fed through, leaving the vapor control layer intact and maintaining fire safety. In almost all installation situations, the ISO block can be used to provide a gap-tight finish for the flue in the roof, floor or wall.

ISO-block is a modular prefabricated transit with no thermal bridge. Using the ISO-block ensures that the distance to combustible material is ensured 0 mm and meets BENG requirements and ensures energy conservation within the building envelope.

ISO block models

A roof penetration can use the ISO-block high and a ceiling penetration uses the ISO-block low. It is recommended to combine ISO-block high with ISO-block low for best results. The ISO block is suitable for the transit of double-walled systems.

- *To install ISO-block High and ISO-block low, please refer to the manual in the Appendix.*



3.2.5 Finishes

If a sheathing is installed at a combustible roof, it will be applied up to the roof sheathing. The roof support should be installed at the roof boarding. Remove any insulation material around the duct. Observe the distance to combustible materials as stated in the DoP. The passage in a non-combustible roof may be closed around the duct. Ventilation grates should be placed under the penetration to ensure adequate ventilation.

For flat roof construction, a wall bracket should be placed under the roof as a substitute for the roof support.

Next, the roof plate and storm collar can be applied. Apply the appropriate roof plate and storm collar as shown in Figure 12.

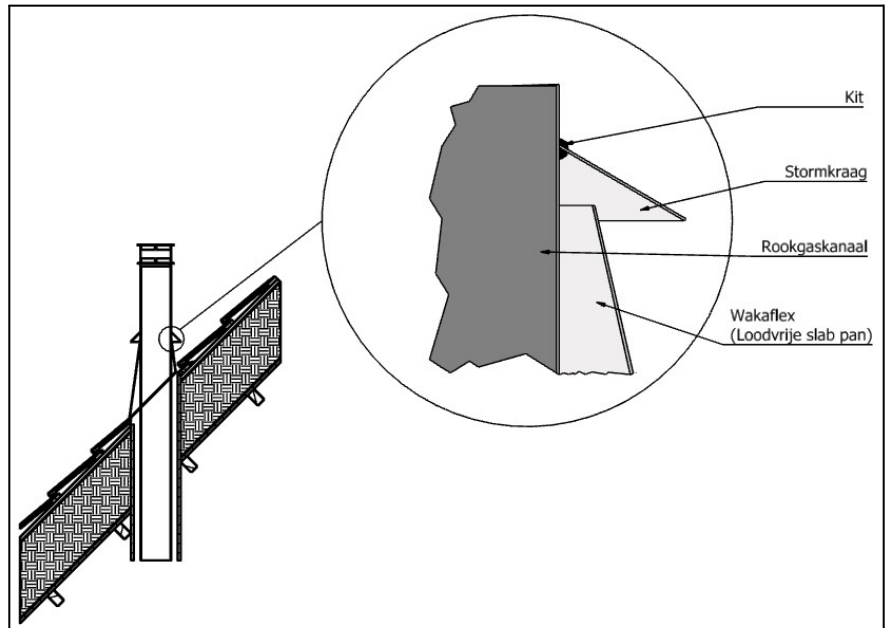


Figure 12, Mounting storm collar roof

With roof penetrations (roof sheets and batten sheets) the storm collar is used to make the gap between the chimney section and the cone of the roof sheet or batten sheet rain free. To do this, slide the storm collar around the chimney section which is fed through the roof sheet or batten until it rests horizontally on the curb. Make sure that the section is free of grease. Mark out the section around and along the top of the storm collar. Slide the storm collar up. Then apply a bead of UV-resistant sealant to the line of demarcation. Then push the storm collar down into the sealant and then tighten the hose clamp on the storm collar. Most of the sealant should reach the bottom of the storm collar.

With a wall penetration, the storm collar/cover plate is glued to the wall to make it rainproof. *The storm collar is glued in the upper half, see Figure 13. The lower half is not glued, this is to drain possible rainwater between the wall and storm collar/cover plate.

Please note that direct discharge after a wall penetration is not permitted. The duct must continue to be constructed on the outside until the correct outlet area is reached. More explanation follows in the next section.

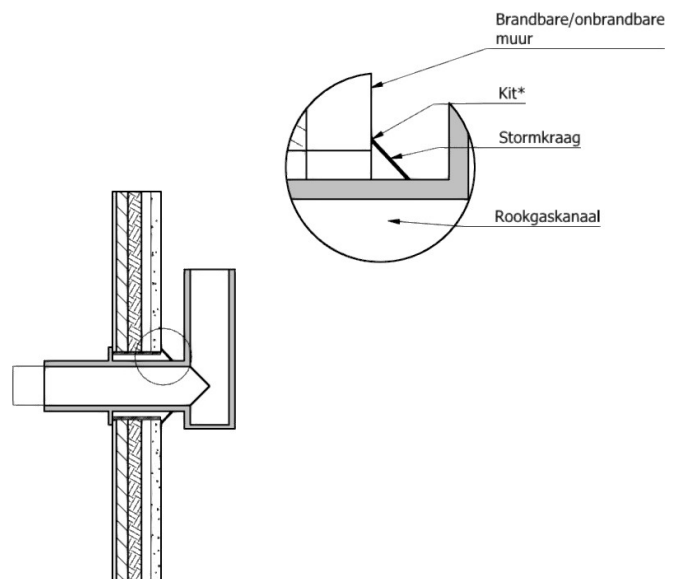


Figure 13, Mounting storm collar wall

3.2.6 Outlet

The outlet of the flue gas duct must meet the requirements for flow directions stated in NEN 2757-1:2019. An outlet that meets these requirements causes less nuisance has a better draught. The ridge of the roof (or as close to the ridge as possible) is the best place for the outlet. The flue will always need to be in the free outlet area.

When choosing the outlet location, nuisance must be counteracted. Consult NEN 2757 for all dilution factor requirements. Take into account inflow openings of neighbors to prevent nuisance. For a pitched roof with a roof pitch greater than 23°, the formula from NEN 2757

applies: $H=(0.5+0.16(\alpha-23))B$

H =Height of outlet α =

Roof pitch

B = Horizontal distance between ridge and channel

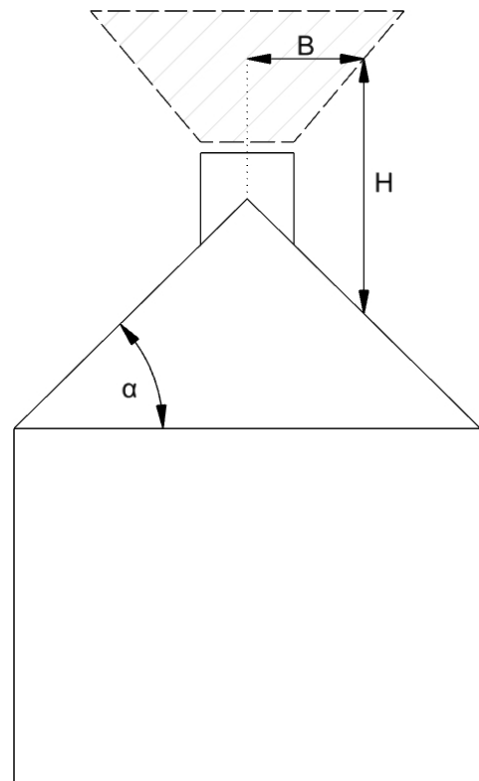


Figure 14, Height calculation of outlet

For a pitched roof with a roof pitch greater than 23°, the outlet will take place in the calculated taper according to the formula from NEN 2757. This cone will take place half a meter above the ridge of the roof. (See Figure 16)

The type of roof determines the outlet area for the flue. Below are the situations shown with the different roof types. (See Figures 15 and 17) These outlet areas are for tall buildings in the area only. For a flat roof or a pitched roof with a roof pitch less than 23°, the outlet will need to extend at least 0.5 meters above the roof.

The BBL states that the flue should discharge at least one meter from the property boundary. If you have questions or doubts about achieving the correct dilution factor, consult Schiedel's technical help desk.

High buildings can influence the draft of the flue, for this there are requirements mentioned in the NEN 2757. The distance to adjacent buildings must be investigated. If the distance is less than 15 meters from the adjacent buildings, the outlet must be 10° from the adjacent buildings. If the distance is greater than 15 meters the outlet may take place in the calculated cone. In both situations, a draft hood must be used. The 0.5 m* indicates that for adjacent buildings, the outlet may not take place in the prohibited outlet area, despite the fact that the outlet is 0.5 m

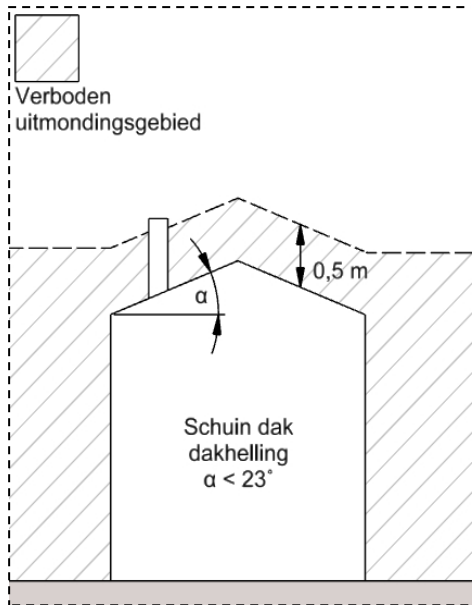
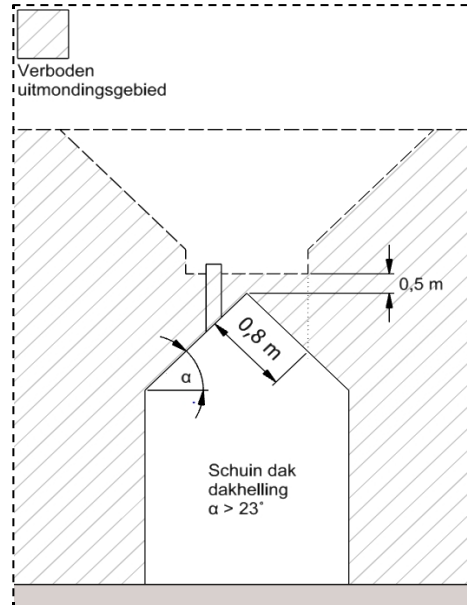


Figure 15, Exit roof pitch



<math>< 23^\circ</math> Figure 16, Exit roof pitch $> 23^\circ$

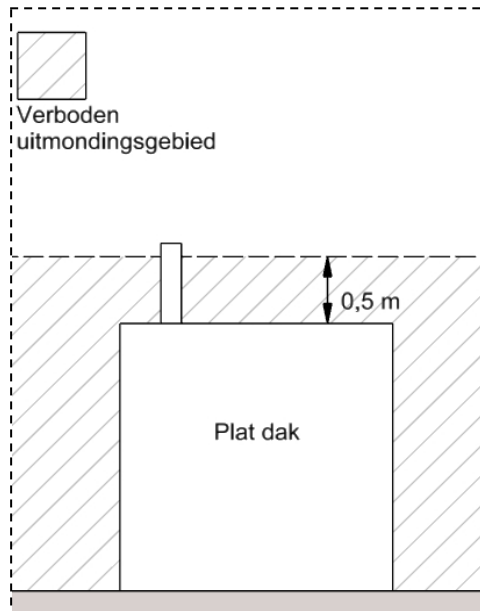


Figure 17, Flat roof outlet

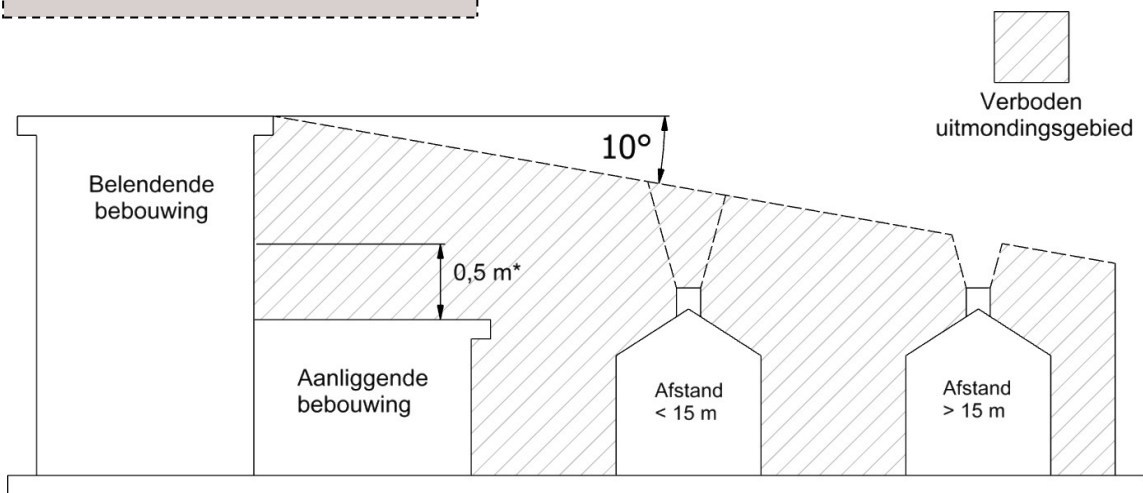


Figure 18, Outlet area at adjacent buildings

4 Maintenance

4.1 Cleaning instruction

The chimney should be swept annually. With more intensive use, the chimney should be swept up to 4 times on an annual basis. Sweeping is done by a nylon sweeping brush with the same diameter as the flue. The sweeping of the chimney is preferably done by a recognized chimney cleaning company, member of the A.S.P.B. (Algemene Schoorsteenvegers Patroons Bond).

4.2 What to do at chimney fire?

In the event of a chimney fire, call the fire department, dampen the fire in the fireplace or stove, extinguishing it with sand if necessary. Then close the chimney valve, preventing oxygen entry into the chimney. Never extinguish a chimney fire with ramoneur or water. Irreparable damage will result and the system must be replaced. After a chimney fire, the flue must always be inspected for reusability by a body recognized by Schiedel (TNO, Fire Brigade) and in the presence of Schiedel, inspecting the system internally to check the integrity of the system.

Solid fuels must be stored properly by keeping them dry. Only approved fuels should be used and suitable for the appliance, if necessary refer to the appliance manufacturer's instructions.

5 Attachments

5.1 Assembly instructions ISO block

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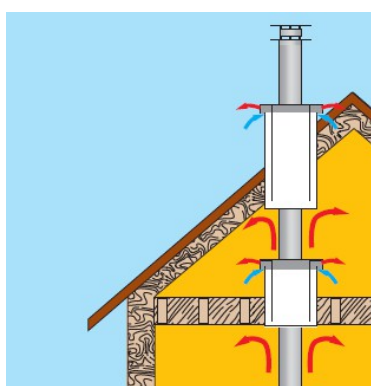


1.0 Introduction

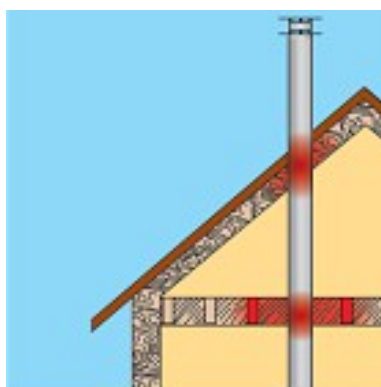
A new measurement tool for the energy performance of new homes was introduced on Jan. 1, 2021. This measurement tool is called BENG and stands for nearly energy-neutral buildings. BENG follows the European EPBD directive, this directive aims to improve energy consumption in homes/buildings in the European Union.

BENG is divided into 3 topics. These are: maximum energy requirement, primary fossil energy consumption and renewable energy share. Every new construction house is required to perform a BENG calculation. The building envelope is included in the calculation of the BENG value. This makes the installation of insulation in the walls, roofs, floor and ceiling increasingly important. However, fire safety will still need to be ensured. The ISO block is a fire-safe penetration that prevents energy loss as much as possible.

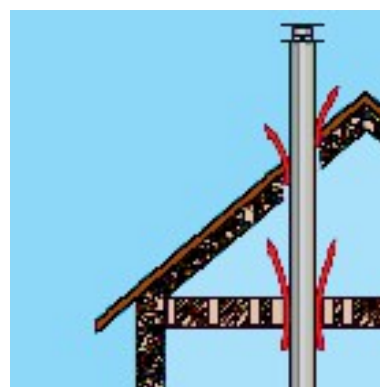
The ISO-block allows the house to be finished airtight, leaving the vapor control layer intact to prevent condensation problems and maintaining fire safety. In almost all installation situations, the ISO-block can be used to provide a gap-tight finish to the flue in the roof and floor. Using the ISO-block ensures that the distance to combustible material of 0 mm is guaranteed. The ISO block meets the BENG requirements and ensures energy conservation within the building envelope. ISO-block high can be used for a roof penetration and ISO-block low can be used for a ceiling penetration. It is recommended to combine ISO-block high with ISO-block low for best results. The ISO-block® can be used for AT and MF.



*Figuur 1, Luchtstroom
ISO-Block*



*Figuur 2, Brandbare
doorvoeringen*



Figuur 3, warmteverlies

2.0 General instructions ISO- block

The ISO-Block system must be installed according to national regulations and manufacturer's instructions. Because of its energy-saving feature, ISO-Block is extremely suitable to help meet BENG requirements. The ISO-block cannot be used for wall penetrations. Please note when mounting that the ISO-block is not suitable to support the chimney in axial direction. It is recommended that the roof be finished by a specialist.

- Check that all parts are present
- Check that all parts are undamaged
- It is recommended that PPE be worn
- The ISO block is not suitable for wall penetrations

2.0 Preparation

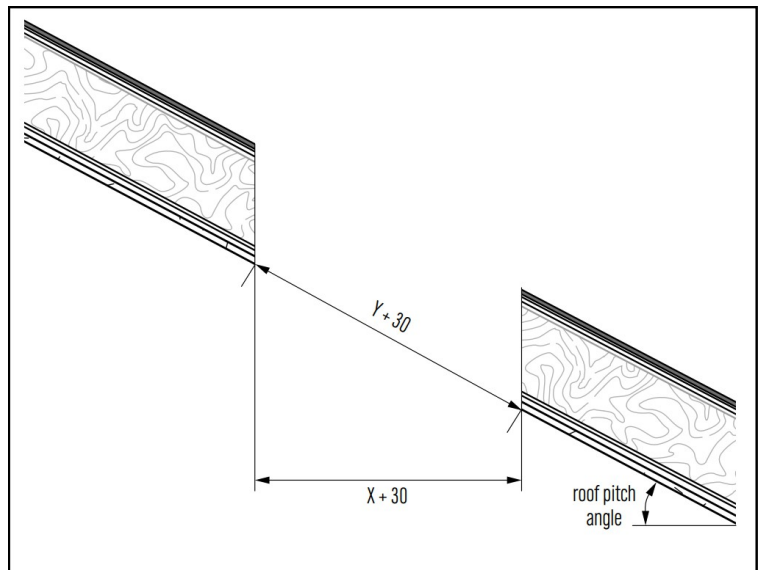
2.1 Transit sloped roof

In a penetration of a pitched roof, the ISO-block high is applied. By installing the ISO-block high you guarantee a distance to combustible material of 0 mm in the penetration of the pitched roof....

A sheath and bib pan can be used for waterproof mounting. The sheath is to protect the ISO-Block material. The sleeve can be cut to size on site. A vapor retarder can be used to make the ISO-Block tight. In situations where the ISO-Block is in too large a space, there is a foam layer that can seal this space.

To achieve a feed-through through thicker structures with steeper gradients, an extension kit may be required. These come in lengths of 300, 500 and 700 mm.

	y (mm) at roof angle				
x (mm)	10°	20°	30°	40°	50°
320	325	341	370	418	498
365	371	388	421	476	568
430	437	458	497	561	669



Tabel 1, grootte tracé

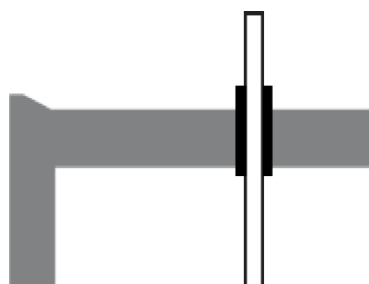
Figuur 5, Doorvoer hellend dak



2.2 Flat roof penetration

Flat roof penetration is done with the ISO-Block high. By installing the ISO-Block you guarantee a distance to combustible material of 0 mm in the transit of the flat roof. For the conduit, a square hole must be made. The size of the hole will be the length of the ISO-Block plus 30 mm and the width of the ISO-Block plus 30 mm.

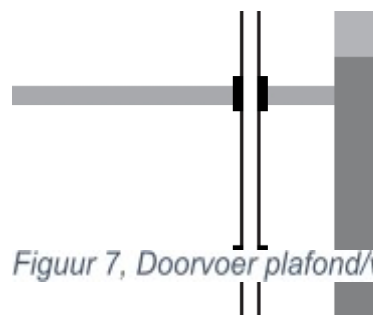
A sheathing and flat roof plate can be used for a gap-tight installation. The sheathing is to protect the ISO-Block material. The cladding can be cut to size on site. The flat roof plate ensures that the transition from the existing roof covering to the ISO-Block is rain free. A vapor retarder can be used to install the ISO-Block seamlessly. In situations where the ISO-block is in too large a space, there is a foam layer that can seal this space.



Figuur 6, Doorvoer plat dak

2.3 Roof penetration

Floor penetration is done by means of the ISO-Block low. By installing the ISO-Block you guarantee a distance to combustible material of 0 mm in the ceiling/floor penetration. For the routing, a square hole must be made with the length plus 30 mm and width plus 30 mm of the ISO-Block. On floors where the possibility of contact exists and to secure the DtC of 0 mm, the flue will have to be cased. How the flue must be cased with the use of ISO-block can be found in Section 2.5.



Figuur 7, Doorvoer plafond/vloer

2.4 Interior and exterior finishing ISO- block

The ISO-block can be installed either inside through a floor/floor (ISO-block low) or outside through the roof (ISO-block high). In both situations, the ISO block must be finished differently.

Once the ISO block is installed inside, only the ventilation plate needs to be installed after assembly. However, the distance to combustible materials of 0 mm will have to be taken into account. This distance is achieved by placing a casing from the ISO-block to the roof boarding.

- See also section 3.2.1 interior finishing and 5.0 enclosure.

When installing the ISO block through a roof penetration, it will be made rainproof. This can be achieved with a bibpan or a roof plate. After the bibpan or roof plate is installed, the metal sheath can be slid over the ISO-block and the ventilation plate installed. To prevent rain from entering the vent plate, a storm collar will be placed around the flue.

- See also section 3.2.2 exterior finishing.

2.5 Casing

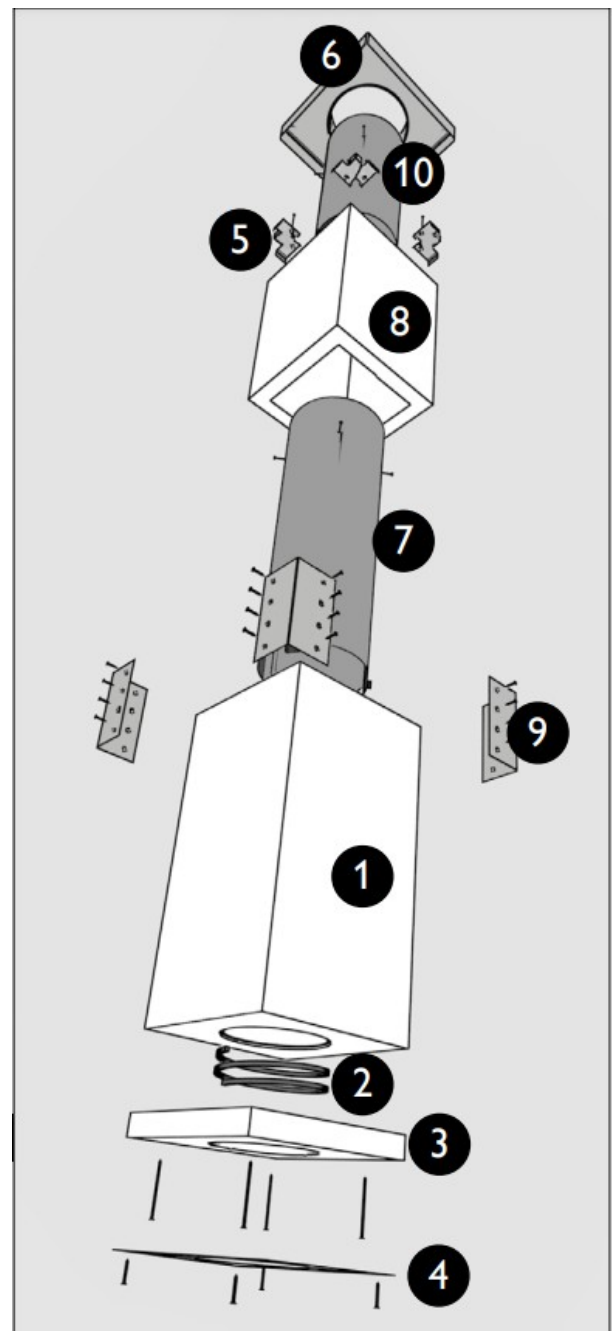
To comply with the DTC and touch safety according to the Dutch standards, a casing must be placed at floor level where possible touching can take place. The casing will be made of fire-resistant material of fire class A-1. When using a combination of ISO-block low and ISO-block high, the casing can be mounted from ISO-block low to ISO-block high. When using a single ISO-block, the casing will run to the roof boarding.

- See also section 5.0 enclosure.

3.0 ISO Block High

3.1 Parts

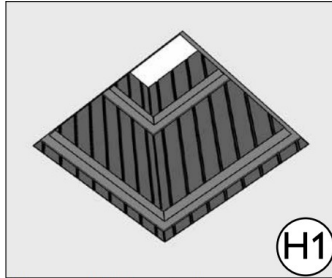
- 1 ISO Block
- 2 Sealing cord
- 3 ISO Block
- 4 Cover plate/Rosette (optional)
- 5 Spacers (4x)
- 6 Vent plate
- 7 Sleeve
- 8 Extension block (part of Extension set, optional)
- 9 Extension brackets (part of Extension set, optional) (4x)
- 10 Extension sleeve (part of Extension set, optional)



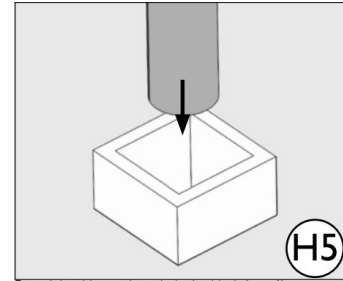
Figuur 8, Onderdelen ISO-block High

3.2 Mounting ISO Block High

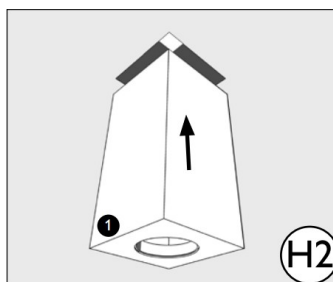
H1 Make a square hole in the roof. For the size of the hole see: preparations.



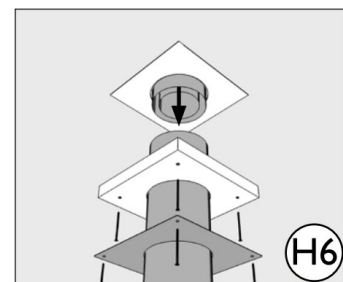
H5 Extend the flue pipe from the top of the ISO block.



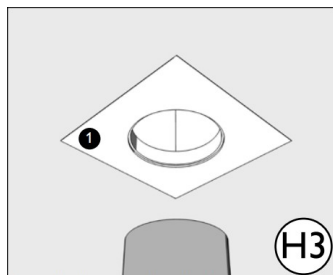
H2 Slide the ISO block (part 1) into the hole in the roof.



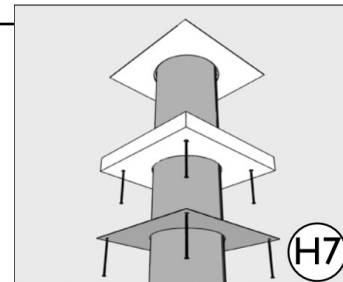
H6 To avoid coupling problems, make sure that the female coupling in the ISO-Block faces the flue gas duct.



H3 Secure the ISO block in the structure and seal it (with PUR, for example).

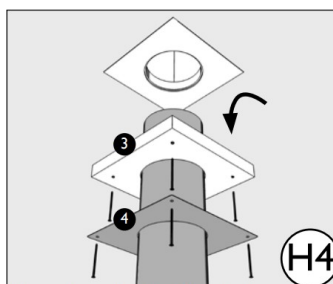


H7 Couple the female coupling of the flue gas duct from the ISO-Block in the flue gas duct from the appliance.

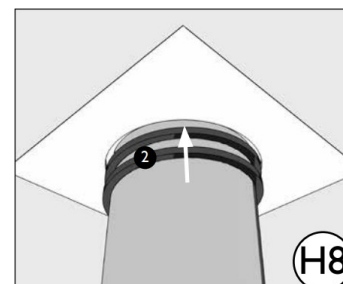


H4 Optional: First, slide the cover plate/rosette (Part 4) over the flue gas duct.

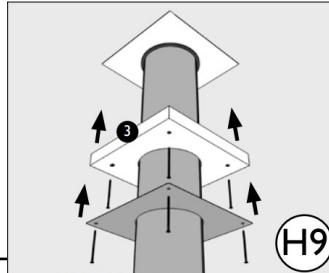
Slide the ISO block (3) over the flue gas duct connected to the unit.



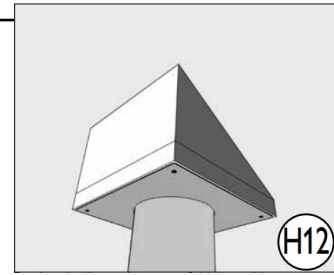
H8 Wrap the sealing rings twice around the flue and push it up. Press the sealing rings into the chamber of the ISO-Block.



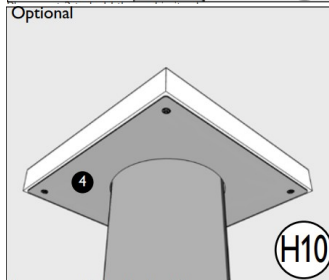
H9 Slide up the ISO block (part 3) and tighten the screws.



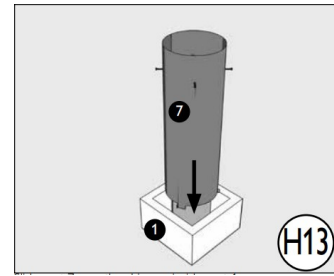
H12 Optional NOTE: For pitched roofs, only a square cover plate is possible



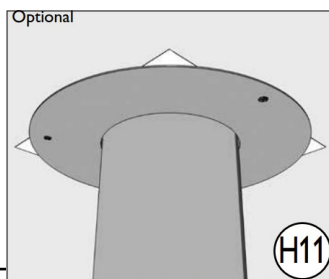
H10 Optional The cover plate can be placed upward against the ISO block and screwed in place.



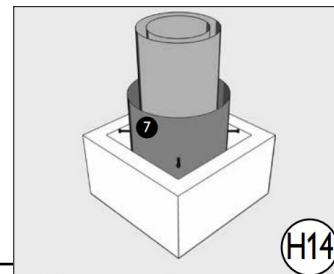
H13 Slide the sleeve (part 7) over the flue gas duct in the ISO-Block.



H11 Optional The rosette can move upward against the ISO block be put on and screwed down.

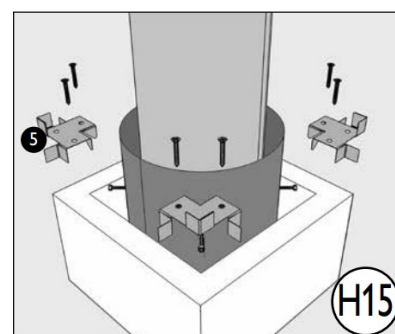


H14 Tighten the bolts to center the sleeve.

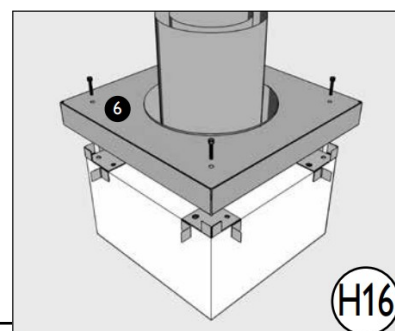


3.2.1 Interior finishing ISO- Block

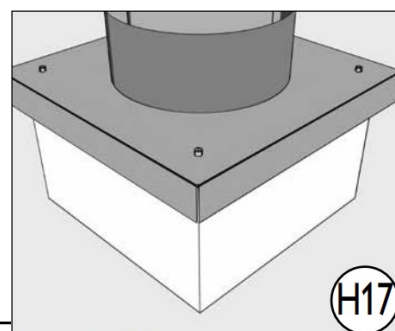
- H15 Screw the spacers in place with two screws on the top of the ISO-Block. The two screws go through the left and right holes of the spacer (part 5). (The hole in the corner of the spacer remains open).



- H16 Place the ventilation plate flat side up on the spacers. Place bolts in the four holes in the corners of the ventilation plate, these also go through the hole in the corner of the spacers.

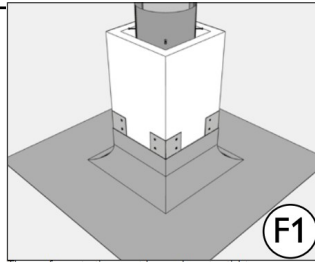


- H17 Secure the ventilation plate by tightening the bolts.

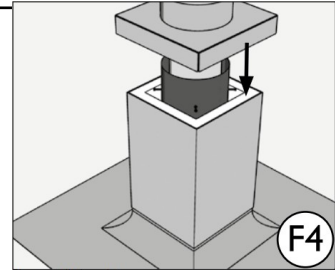


3.2.2 Exterior finish ISO- block

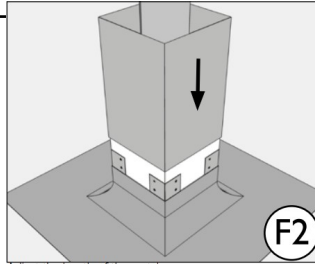
F1 Make sure the roof finish is watertight by using a bib tile or roof sheet.



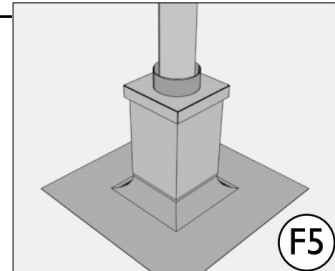
F4 Slide the rainproof ventilation plate over the flue channel up to the ISO block.



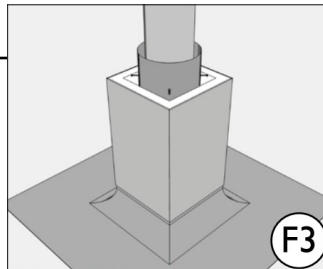
F2 Make the metal sheath to size. (This can be tailored on site)



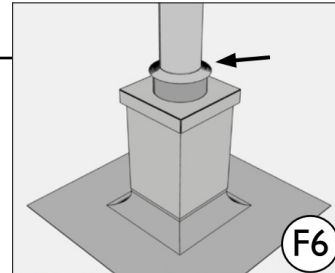
F5 Place bolts in the four holes in the corners of the rainproof ventilation plate. Tighten the bolts.



F3 Slide the sheath over the ISO block.



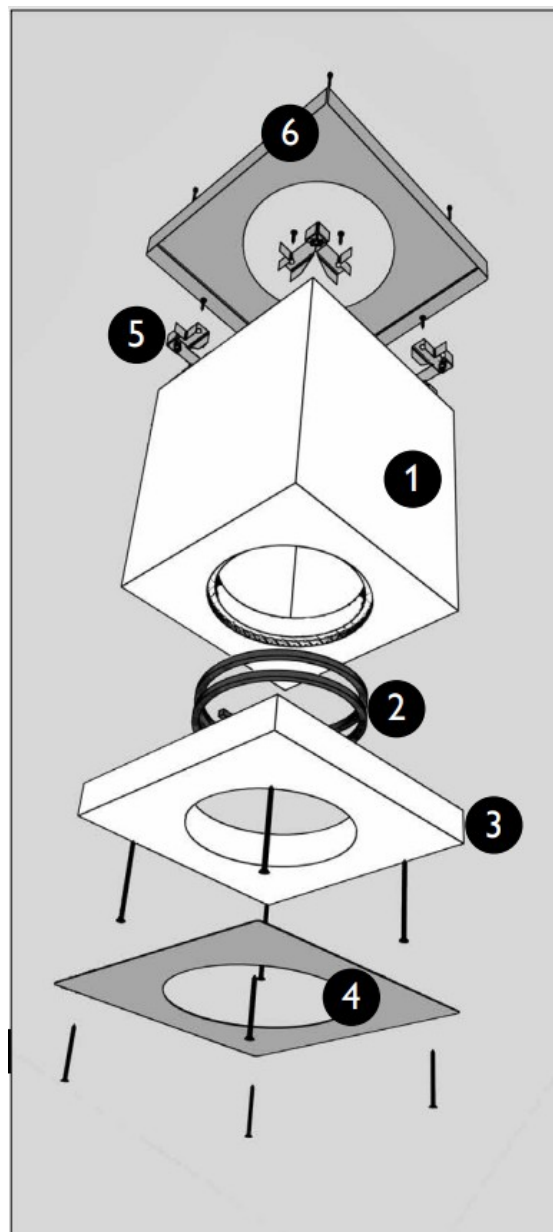
F6 Slide the storm collar (ISO-block storm collar) around the flue pipe. Be sure to leave space between the vent plate and storm collar.



4.0 ISO-Block Low

4.1 Parts

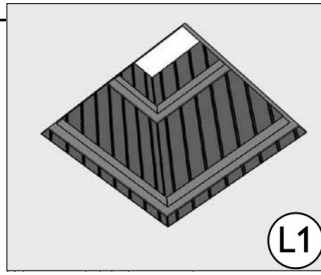
- 1 Iso-block
- 2 Sealing cord
- 3 Iso-block
- 4 Square fish/rosette (optional)
- 5 Spacers (4x)
- 6 Vent plate



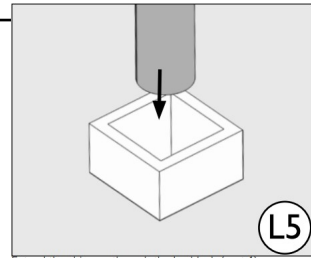
Figuur 9, Onderdelen ISO-block Low

4.2 Mounting ISO block Low

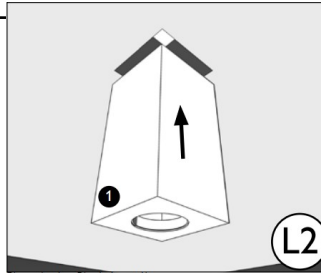
L1 Make a square hole in the ceiling/floor. For the size of the hole see: preparations.



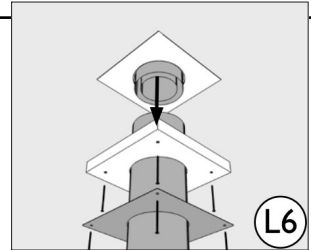
L5 Extend the flue from the top of the ISO block.



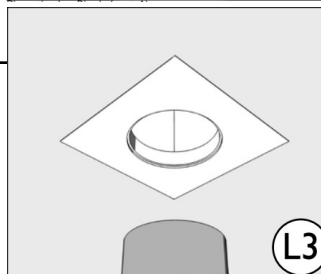
L2 Slide the ISO block (part 1) into the ceiling/floor hole.



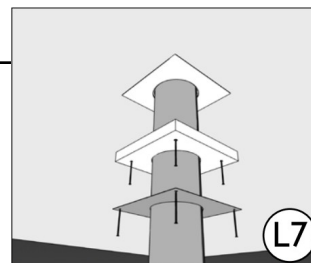
L6 To avoid coupling problems, make sure that the female coupling of the flue pipe in the ISO-Block faces the flue pipe.



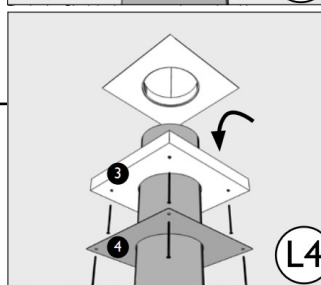
L3 Secure the ISO block in the structure and seal it (with PUR, for example).



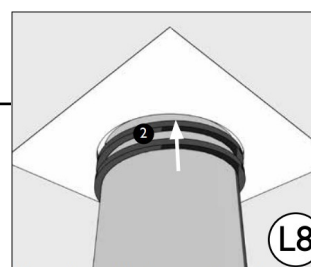
L7 Connect the female coupling of the flue from the ISO-Block into the flue from the appliance.



L4 Optional: First slide the cover plate/rosette (Part 4) over the flue pipe.

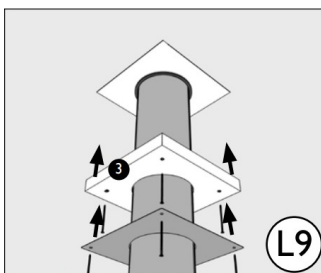


L8 Wrap the sealing rings twice around the flue and push it up. Press the sealing rings into the chamber of the ISO-Block.

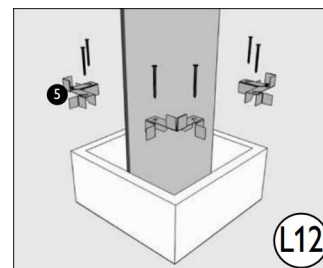


Slide the ISO block (3) over the flue gas duct connected to the unit.

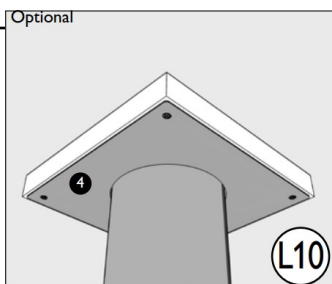
L9 Slide up the ISO block (part 3) and tighten the screws.



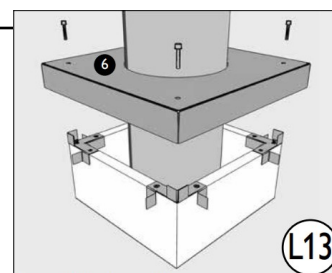
L12 Secure the spacers with two screws on the top of the ISO-Block. The two screws go through the left and right ends of the spacer. (The hole in the corner of the spacer remains open).



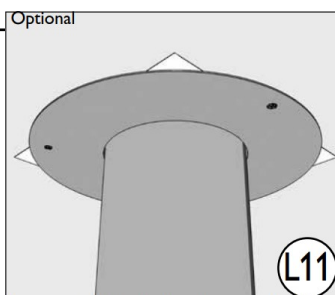
L10 Optional
Optional The cover plate can be placed upward against the ISO block and screwed in place.



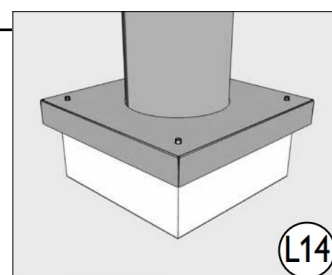
L13 Place the ventilation plate flat side up on the spacers. Place bolts in the four holes in the corners of the ventilation plate, these also go through the hole in the corner of the spacers.



L11 Optional
Optional The rosette can be placed upward against the ISO block and screwed in place.

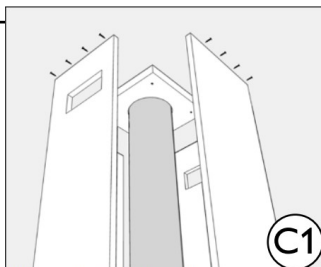


L14 Secure the ventilation plate by tightening the bolts.

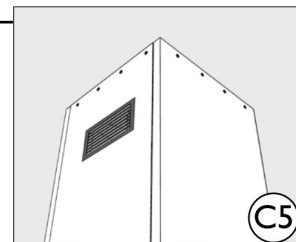


5.0 Casing ISO-block (optional)

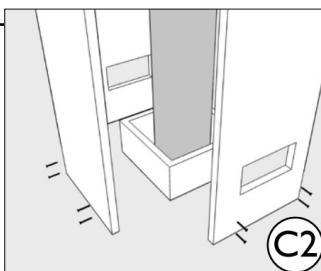
C1 Measure the material of the enclosure. Make sure the two sides of the enclosure are longer than the front and back. Make ventilation openings of 100 mm by 200 mm in the casing material.



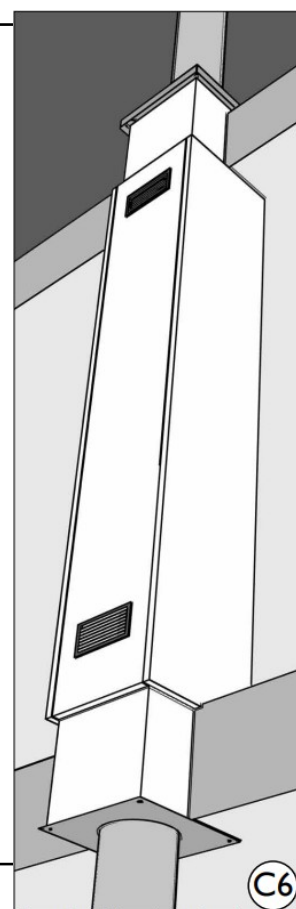
C5 Place the vents and fasten them to the casing.



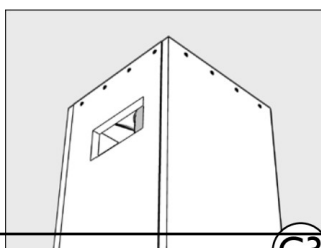
C2 Remove the ventilation plate from the ISO-block. Attach the casing to the top of ISO-block low.



C6 Make sure the ventilation openings remain clear. This is to ensure that the temperature does not rise too high inside the enclosure.



C3 Fix the front and rear casing to the ISO block high. Attach the sides to both the ISO block, and the front and rear casing.



C4 Fix the front and rear casing to the ISO block low. Attach the sides to both the ISO-block, and the front and rear casing.

