# HOUSELINER® SYSTEM

**Houseliner System is a complete system for rehabilitation of sewer pipes in buildings. It is installed with inversion technology, both in horizontal and vertical pipes and through all bends and connections.**

The material is cured inside the old pipes and creates a new self-supporting pipe systems with a durability that matches new PP pipe. Houseliner System consists of high quality resin, liners and Sacparts components.

## HORIZONTAL AND VERTICAL SEWER PIPES

A pipe made by flexible liner always provide a predetermined wallthickness the entire lenght of the pipe. The liner in Houseliner System can be found in dimensions 30 - 400 mm and 2,5 - 5 mm thickness.

## BENDS

The liner in Houseliner System is very flexible and can be installed in pipes with multiple bends up to 90° without disturbing wrinkles.

## DIMENSIONAL CHANGES

Changes in diameter is a major challenge for many relining methods, but not for Houseliner System. The liner is so flexible that it makes it possible to install even though having several dimensional changes in the pipe.

## BRANCH PIPES

The weakest point in a sewage system is usually the branches. When installing Houseliner System, prefabricated branch pipes are used, regardless of the size and design of branches.

## BRANCHING CONNECTIONS

Branching connections can quickly and safely be installed using the Sacparts Branching Connection. Perfect to facilitate for example a new kitchen drain.

## STANDARDIZED TRANSITIONS

Sacpart Relining Connection secures the transition from a conventional pipe to a renovated pipe.

# LINER SYSTEM
## HOUSELINER

**Our flexible liners are the basis for a self-supporting piping system, that can handle both dimensional changes and 90° bends with an absolute minimum of wrinkles. Combined with our Houseliner Resin the new sewer pipes will get a predetermined wall thickness of your choice. The new pipes are high E-modulus and chemically resistant after curing. The characteristics are much like a new, conventionally made PP sewer pipe.**

Houseliner FL and FLT combined with Houseliner Resin are both tested for life expectancy at Eurofins. The test showed that you can expect more then 50% of the initial strength after 50 years of service.

Approved according to **RISE**s standard **CR072** in Sweden.

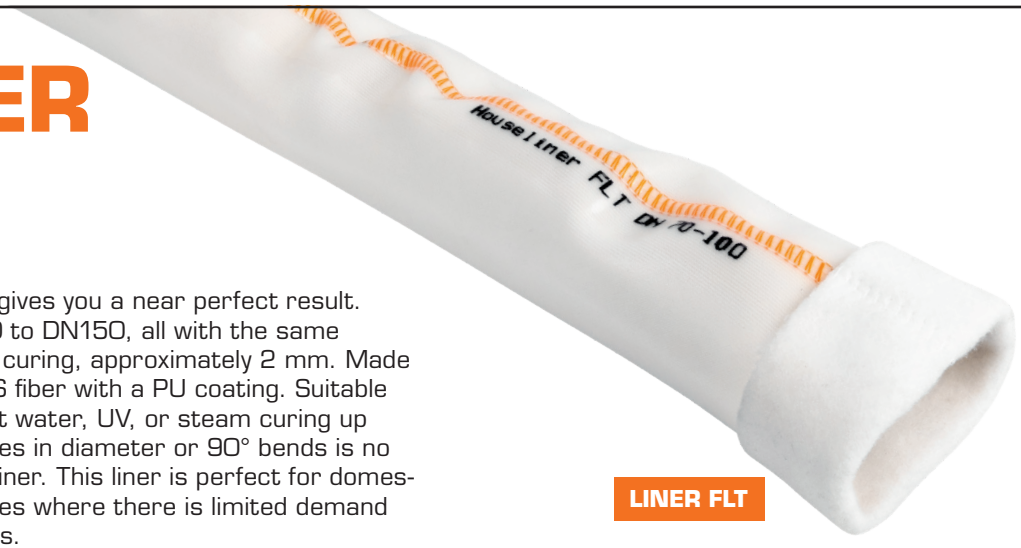
**ASTM** approved, tested by **Eurofins**.


ASTM INTERNATIONAL

eurofins

CERTIFIERAD
CR072
SP
RI. SE

# LINER
## FLT




LINER FLT

Houseliner FLT gives you a near perfect result. Made for DN50 to DN150, all with the same thickness after curing, approximately 2 mm. Made from 100% PES fiber with a PU coating. Suitable for ambient, hot water, UV, or steam curing up to 70°C. Changes in diameter or 90° bends is no match for this liner. This liner is perfect for domestic pipes, or pipes where there is limited demand for ring stiffness.
The ease to wet out, combined with low resin usage, gives you more time to install your liner instead of spending time at your wet-out table.

| Liner FLT | |
|---|---|
| HL-FLT-050 | Houseliner FLT 50-70 (50m) |
| HL-FLT-055 | Houseliner FLT 70-100 (100m) |
| HL-FLT-060 | Houseliner FLT 100-150 (100m) |

# LINER
## FL


**LINER FL**

Houseliner FL is your go-to liner. It comes in a variety of sizes and thicknesses to suite your needs. From DN30 all the way to DN400. Wall thickness from 2,5 to 5mm depending on your choice of liner. Made from 100% PES fiber with a TPU coating. Suitable for ambient, UV or hot water curing up to 80°C.

Houseliner FL can handle up to 90° bends and changes in diameter. Whatever your needs may be, Houseliner FL can almost for certain fulfill your demands. The wet-out process is extremely fast, giving you more time to invert then spending time at the wet-out table.

| Liner FL Standard assortment | |
|---|---|
| HL-FL-3525 | Houseliner FL 2,5mm DN30-50 (25m) |
| HL-FL-3625 | Houseliner FL 2,5mm DN45-70 (50m) |
| HL-FL-3725 | Houseliner FL 2,5mm DN50-70 (50m) |
| HL-FL-4730 | Houseliner FL 3mm DN63-100 (100m) |
| HL-FL-4930 | Houseliner FL 3mm DN100-150 (100m) |
| HL-FL-5740 | Houseliner FL 4mm DN100-150 (100m) |
| HL-FL-5840 | Houseliner FL 4mm DN150-225 (100m) |
| HL-FL-6700 | Houseliner FL 5mm DN225-300 (100m) |
| HL-FL-7620 | Houseliner FIX 3mm DN75 (100m) |
| HL-FL-7650 | Houseliner FIX 3mm DN100 (100m) |
| HL-FL-7670 | Houseliner FIX 3mm DN150 (100m) |

| Liner FL Produced when ordered assortment | |
|---|---|
| HL-FL-3750 | Houseliner FL 2,5mm DN63-75 (50m) |
| HL-FL-3760 | Houseliner FL 2,5mm DN70-100 (100m) |
| HL-FL-4525 | Houseliner FL 3mm DN30-50 (50m) |
| HL-FL-4530 | Houseliner FL 3mm DN45-70 (50m) |
| HL-FL-4600 | Houseliner FL 3mm DN60-75 (50m) |
| HL-FL-4615 | Houseliner FL 3mm DN63-75 (50m) |
| HL-FL-4630 | Houseliner FL 3mm DN50-70 (50m) |
| HL-FL-4830 | Houseliner FL 3mm DN70-100 (100m) |
| HL-FL-4900 | Houseliner FL 3mm DN100-120 (100m) |
| HL-FL-5540 | Houseliner FL 4mm DN63-100 (100m) |
| HL-FL-5640 | Houseliner FL 4mm DN70-100 (100m) |
| HL-FL-5650 | Houseliner FL 4mm DN80-110 (100m) |
| HL-FL-5800 | Houseliner FL 4mm DN120-150 (100m) |
| HL-FL-5940 | Houseliner FL 4mm DN200-250 (100m) |
| HL-FL-6550 | Houseliner FL 5mm DN150-225 (100m) |
| HL-FL-6650 | Houseliner FL 5mm DN200-250 (100m) |
| HL-FL-6750 | Houseliner FL 5mm DN250-300 (100m) |
| HL-FL-6850 | Houseliner FL 5mm DN300-400 (100m) |
| HL-FL-7525 | Houseliner FIX 2,5mm DN75 (100m) |
| HL-FL-7550 | Houseliner FIX 2,5mm DN100 (100m) |

*- Extremely fast wet-out process, long working time in relation to curing time, gives you the possibility to make more installations per day*

Markus Matsson - Sales & Order

# EPOXY

## Resin Base, Ultra, Fast, Medium, Slow and Hot Cure

**Our range of epoxy resin is tailored to suit most liners. Both woven and felt liner are able to use Houseliner resin.**
There are five different curing agents to suit your needs.
Ultra – cures in 2 hours at 20°Celcius, but still gives you approx. 16 minutes of working time.
Fast – cures in 3 hours at 20°Celcius, but still gives you approx. 18 minutes of working time.
Medium – cures in 6 hours at 20°Celcius, and gives you approx. 42 minutes of working time.
Slow – cures in 12 hours at 20°Celcius, and gives you approx. 3 hours of working time.
Hot Cure – made for steam or hot water curing with a high temperature resistance. Working time approx. 70 minutes.

All our curing agents are paired with Houseliner Resin Base. Ultra, Fast, Medium, and Slow are mixable with each other if preferred, or needed, as they all have the same mixing ratio.
Houseliner Resin releases no environmentally hazardous substances when fully cured.
The color is bright orange, making it easy to see when the liner is saturated. Other benefits are that you easily can spot small drops, and identify the liner as a Houseliner product after curing.
Houseliner resin is tracked by Batch No. and the shelf life is expected to be at least 18 months from production date.


| Epoxy 1,54 kg | |
|---|---|
| HL-RM-1515 | Medium Hardener 0,44 kg and Resin Base 1,1 kg |
| HL-RF-1510 | Fast Hardener 0,44 kg and Resin Base 1,1 kg |
| HL-RU-1440 | Ultra Hardener 0,44 kg and Resin Base 1,1 kg |


| Epoxy 7,7 kg (6,93 kg) | |
|---|---|
| HL-RS-1500 | Slow Hardener 2,2 kg |
| HL-RM-1500 | Medium Hardener 2,2 kg |
| HL-RF-1490 | Fast Hardener 2,2 kg |
| HL-RU-1430 | Ultra Hardener 2,2 kg |
| HL-RH-1270 | Hot Cure Hardener 1,43 kg |
| HL-BA-002 | Resin Base 5,5 kg |

# ULTRA HARDENER
Cures in 2 hours at 20°C
Approx. 16 min working time


| Epoxy 14 kg (12,6 kg) | |
|---|---|
| HL-RS-1420 | Slow Hardener 4,0 kg |
| HL-RM-1415 | Medium Hardener 4,0 kg |
| HL-RF-1410 | Fast Hardener 4,0 kg |
| HL-RU-1420 | Ultra Hardener 4,0 kg |
| HL-RH-1260 | Hot Cure Hardener 2,6 kg |
| HL-BA-001 | Resin Base 10 kg |

NEW

# HOUSELINER® SHAKE 2H


**To minimize the shrinkage and to get all the properties from an epoxy for your packer installations, the Houseliner Shake 2h is finally here.**

Shake 2h comes in two bottles with two different colors for the base and the curing agency. When mixed and Shaked by hand a new color will occur, that's when you know it´s ready to be used. Shake 2h has a fast curing time, and can be used for installations of packers, short repairs and junctions.

During the development we have had companies from different countries giving us feedback, and we are really satisfied with the end result.

| SHAKE 2H | |
|---|---|
| HL-RU-1460 | Houseliner Shake 2h 0,91 kg |

# Mixing ratios for Houseliner Epoxy

| | ULTRA, FAST, MEDIUM and SLOW | | HOT CURE | |
|---|---|---|---|---|
| Weight in KG | Base in GRAMS | Hardener in GRAMS | Base in GRAMS | Hardener in GRAMS |
| 1 | 714 | 286 | 794 | 206 |
| 2 | 1429 | 571 | 1587 | 413 |
| 3 | 2143 | 857 | 2381 | 619 |
| 4 | 2857 | 1143 | 3175 | 825 |
| 5 | 3571 | 1429 | 3968 | 1032 |
| 6 | 4286 | 1714 | 4762 | 1238 |
| 7 | 5000 | 2000 | 5556 | 1444 |
| 8 | 5714 | 2286 | 6349 | 1651 |
| 9 | 6429 | 2571 | 7143 | 1857 |
| 10 | 7143 | 2857 | 7937 | 2063 |
| 11 | 7857 | 3143 | 8730 | 2270 |
| 12 | 8571 | 3429 | 9524 | 2476 |
| 13 | 9286 | 3714 | 10317 | 2683 |
| 14 | 10000 | 4000 | 11111 | 2889 |
| 15 | 10714 | 4286 | 11905 | 3095 |
| 16 | 11429 | 4571 | 12698 | 3302 |
| 17 | 12143 | 4857 | 13492 | 3508 |
| 18 | 12857 | 5143 | 14286 | 3714 |
| 19 | 13571 | 5429 | 15079 | 3921 |
| 20 | 14286 | 5714 | 15873 | 4127 |
| 21 | 15000 | 6000 | 16667 | 4333 |
| 22 | 15714 | 6286 | 17460 | 4540 |
| 23 | 16429 | 6571 | 18254 | 4746 |
| 24 | 17143 | 6857 | 19048 | 4952 |
| 25 | 17857 | 7143 | 19841 | 5159 |
| 26 | 18571 | 7429 | 20635 | 5365 |
| 27 | 19286 | 7714 | 21429 | 5571 |
| 28 | 20000 | 8000 | 22222 | 5778 |

# Resin curing and working times

| Curing times | | | | | |
|---|---|---|---|---|---|
| Temperature | ULTRA | FAST | MEDIUM | SLOW | HOT CURE |
| + 10°C | 4h | 6h | 12h | 24h | 36h |
| + 20°C | 2h | 3h | 6h | 12h | 18h |
| + 30°C | 1h | 90min | 3h | 6h | 9h |
| + 40°C | 30min | 50min | 90min | 3,5h | 5h |
| + 50°C | 15min | 30min | 50min | 2h | 3h |
| + 60°C | 15min | 30min | 30min | 75min | 2h |
| + 70°C | 15min | 30min | 30min | 50min | 90min |

| Approximately working times at + 20°C | | | | |
|---|---|---|---|---|
| ULTRA | FAST | MEDIUM | SLOW | HOT CURE |
| 16min | 18min | 42min | 3h | 1h 10min |

**Note**:
The Ultra and Fast resin may heat up to very high temperatures if left in large quantities.
Be careful with the leftover resin. Minimal required curing temperature is + 10°C

# Resin consumption and roller distance metric

| Article | HOUSELINER FL 2,5 mm | DN 30-50 | DN 40-60 | DN 45-70 | DN 50-70 | DN 63-75 | DN 70-100 | DN 100-150 | DN 110-160 |
|---|---|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 0,27 kg | 0,35 kg | 0,40 kg | 0,40 kg | 0,55 kg | 0,62 kg | 0,85 kg | 0,93 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 0,26 kg | 0,35 kg | 0,39 kg | 0,39 kg | 0,55 kg | 0,61 kg | 0,84 kg | 0,92 kg |
| Resin consumption all resins in Litre per linear meter: | | 0,25 l | 0,33 l | 0,38 l | 0,38 l | 0,52 l | 0,58 l | 0,80 l | 0,88 l |
| Roller distance of the impregnation plant: | | | | | | 5,5 mm | | | |

| Article | HOUSELINER FL 3 mm | DN 30-50 | DN 45-70 | DN 50-70 | DN 60-75 | DN 63-75 | DN 63-100 | DN 70-100 | DN 100-120 | DN 100-150 |
|---|---|---|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 0,30 kg | 0,49 kg | 0,49 kg | 0,55 kg | 0,57 kg | 0,62 kg | 0,71 kg | 1,02 kg | 1,02 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 0,30 kg | 0,48 kg | 0,49 kg | 0,54 kg | 0,57 kg | 0,61 kg | 0,70 kg | 1,01 kg | 1,01 kg |
| Resin consumption all resins in Litre per linear meter: | | 0,28 l | 0,46 l | 0,46 l | 0,52 l | 0,54 l | 0,58 l | 0,67 l | 0,96 l | 0,96 l |
| Roller distance of the impregnation plant: | | | | | | 6,5 mm | | | | |

| Article | HOUSELINER FL 4 mm | DN 63-100 | DN 70-100 | DN 80-110 | DN 100-150 | DN 120-150 | DN 150-225 |
|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 0,84 kg | 0,93 kg | 1,10 kg | 1,33 kg | 1,55 kg | 2,03 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 0,83 kg | 0,92 kg | 1,09 kg | 1,31 kg | 1,53 kg | 2,01 kg |
| Resin consumption all resins in Litre per linear meter: | | 0,79 l | 0,88 l | 1,04 l | 1,25 l | 1,46 l | 1,92 l |
| Roller distance of the impregnation plant: | | | 8,5 mm | | | | |

| Article | HOUSELINER FL 5 mm | DN 150-225 | DN 200-250 | DN 225-300 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 2,59 kg | 3,46 kg | 3,89 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 2,56 kg | 3,42 kg | 3,84 kg |
| Resin consumption all resins in Litre per linear meter: | | 2,44 l | 3,26 l | 3,66 l |
| Roller distance of the impregnation plant: | | 10,5 mm | | |

| Article | HOUSELINER FIX 3 mm | DN 75 | DN 100 | DN 150 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 0,66 kg | 0,84 kg | 1,33 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 0,66 kg | 0,83kg | 1,31 kg |
| Resin consumption all resins in Litre per linear meter: | | 0,63 l | 0,79 l | 1,25 l |
| Roller distance of the impregnation plant: | | | 6,5 mm | |

| Article | HOUSELINER FLT | DN 50-70 | DN 70-100 | DN 100-150 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear meter: | | 0,43 kg | 0,62 kg | 0,82 kg |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear meter: | | 0,42 kg | 0,61kg | 0,81 kg |
| Resin consumption all resins in Litre per linear meter: | | 0,4 l | 0,58 l | 0,77 l |
| Roller distance of the impregnation plant: | | | 7 mm | |

# Resin consumption and roller distance imperial

| Article | HOUSELINER FL 2,5 mm | DN 30-50 | DN 40-60 | DN 45-70 | DN 50-70 | DN 63-75 | DN 70-100 | DN 100-150 | DN 110-160 |
|---|---|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 0,182 | 0,235 | 0,269 | 0,269 | 0,37 | 0,417 | 0,572 | 0,625 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 0,175 | 0,235 | 0,262 | 0,262 | 0,37 | 0,41 | 0,565 | 0,619 |
| Resin consumption all resins in Gallon per linear feet: | | 0,021 | 0,027 | 0,03 | 0,03 | 0,042 | 0,047 | 0,065 | 0,071 |
| Roller distance of the impregnation plant: | | | | | | 5,5 mm / 0,2165 inch | | | |

| Article | HOUSELINER FL 3 mm | DN 30-50 | DN 45-70 | DN 50-70 | DN 60-75 | DN 63-75 | DN 63-100 | DN 70-100 | DN 100-120 | DN 100-150 |
|---|---|---|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 0,202 | 0,33 | 0,33 | 0,37 | 0,383 | 0,417 | 0,477 | 0,686 | 0,686 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 0,202 | 0,323 | 0,323 | 0,363 | 0,383 | 0,41 | 0,47 | 0,679 | 0,679 |
| Resin consumption all resins in Gallon per linear feet: | | 0,023 | 0,037 | 0,037 | 0,042 | 0,044 | 0,047 | 0,054 | 0,077 | 0,077 |
| Roller distance of the impregnation plant: | | | | | | 6,5 mm / 0,2559 inch | | | | |

| Article | HOUSELINER FL 4 mm | DN 63-100 | DN 70-100 | DN 80-110 | DN 100-150 | DN 120-150 | DN 150-225 |
|---|---|---|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 0,565 | 0,625 | 0,74 | 0,894 | 1,05 | 1,37 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 0,558 | 0,619 | 0,733 | 0,881 | 1,03 | 1,35 |
| Resin consumption all resins in Gallon per linear feet: | | 0,064 | 0,071 | 0,084 | 0,1 | 0,118 | 0,155 |
| Roller distance of the impregnation plant: | | | 8,5 mm / 0,3346 inch | | | | |

| Article | HOUSELINER FL 5 mm | DN 150-225 | DN 200-250 | DN 225-300 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 1,74 | 2,264 | 2,55 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 1,72 | 2,238 | 2,52 |
| Resin consumption all resins in Gallon per linear feet: | | 0,197 | 0,256 | 0,287 |
| Roller distance of the impregnation plant: | | 10,5 mm / 0,4134 inch | | |

| Article | HOUSELINER FIX 3 mm | DN 75 | DN 100 | DN 150 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 0,444 | 0,565 | 0,894 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 0,442 | 0,558 | 0,88 |
| Resin consumption all resins in Gallon per linear feet: | | 0,051 | 0,064 | 0,101 |
| Roller distance of the impregnation plant: | | | 6,5 mm / 0,2559 inch | |

| Article | HOUSELINER FLT | DN 50-70 | DN 70-100 | DN 100-150 |
|---|---|---|---|---|
| Resin consumption Houseliner Ultra, Fast, Medium & Slow per linear feet (pound): | | 0,282 | 0,406 | 0,537 |
| Resin consumption Houseliner Hot Cure & UV Epoxy per linear feet (pound): | | 0,275 | 0,4 | 0,53 |
| Resin consumption all resins in Gallon per linear feet: | | 0,032 | 0,046 | 0,061 |
| Roller distance of the impregnation plant: | | | 7mm / 0,2756 inch | |

# CONSUMABLES

## LDPE HOSE

Low Density Polyethylene. The LDPE hose is used for an extension between the Extruder and the pipe to be relined. It can also be used at the pipe end, if the relining extends past the pipe.

| LDPE Hose | |
|---|---|
| S3-303-120 | LPDE Hose 120-010 Ø 75, 100 m |
| S3-303-175 | LPDE Hose 175-020 Ø 110, 100 m |
| S3-303-205 | LPDE Hose 205-0,20 Ø 135, 100 m |
| S3-303-250 | LPDE Hose 250-020 Ø 160, 100 m |
| S3-303-354 | LPDE Hose 354-0,20 Ø 225, 100 m |

## PULL STRAP

The pull strap is used to control the speed of the installation and will give the installer the possibility to rewind the liner. One end of the pull strap is attached at the centre axle of the Extruder (Inversion drum), the other end is attached to the furthest end of the liner be installed. The pull strap must be longer than the liner.

| Pull Strap | |
|---|---|
| S5-135-027 | Pull Strap 15 mm roll 50 meter |
| S5-135-025 | Pull Strap 25 mm roll 50 meter |

## CLEANING PADS

The pads are extremely effective for grease removal on all equipment and for the user.

| Cleaning Pads | |
|---|---|
| S5-156-020 | Cleaning Pads CL 510 (150 pcs.) |

## CALIBRATION HOSE

The calibration hose is primarily used when installing an open-end liner. When curing with high temperatures use a high-temperature calibration hose.
As an extra precaution, we recommend that you bring a calibration hose of every dimension for each installation, in case of a leak or puncture in the liner

| Calibration Hose | |
|---|---|
| BW-110-075 | CH DN 70, std. temp up to 40°C, (100m) |
| BW-110-100 | CH DN 100, std. temp up to 40°C, (100m) |
| BW-110-125 | CH DN 125, std. temp up to 40°C, (100m) |
| BW-110-150 | CH DN 150, std. temp up to 40°C, (100m) |
| BW-110-200 | CH DN 200, std. temp up to 40°C, (100m) |
| BW-110-225 | CH DN 225, std. temp up to 40°C, (100m) |
| CJ-111-075 | CH Light duty stitch 80° Ø075 (100m) |
| CJ-111-100 | CH Light duty stitch 80° Ø100 (100m) |
| CJ-111-125 | CH Light duty stitch 80° Ø125 (100m) |
| CJ-111-150 | CH Light duty stitch 80° Ø150 (100m) |
| CJ-111-200 | CH Light duty stitch 80° Ø200 (100m) |
| CJ-111-225 | CH Light duty stitch 80° Ø225 (100m) |
| CJ-111-250 | CH Light duty stitch 80° Ø250 (100m) |
| CJ-111-300 | CH Light duty stitch 80° Ø300 (100m) |
| S6-100-099 | CH Light duty stitch Clear DN75 (100m) |
| S6-100-101 | CH Light duty stitch Clear DN100 (100m) |
| S6-100-103 | CH Light duty stitch Clear DN125 (100m) |
| S6-100-104 | CH Light duty stitch Clear DN150 (100m) |
| S6-100-106 | CH Light duty stitch Clear DN225 (100m) |

**AVAILABLE IN ALL SIZES**

## JUBILEE HOSE CLAMPS

The Hose clamps are threaded throughout the entire steel strap to handle multiple dimensions. Used for attaching the liner to the Inversions, or the pull strap to the liner.

# END CAP SYSTEM



## MOUNTING FIXTURE

When preparing for open-ended installation, a mounting fixture is used when gluing the omaplata to the liner.

| Mounting fixture | |
|---|---|
| S3-381-075 | Mounting fixture Ø 75 |
| S3-381-100 | Mounting fixture Ø 100 |
| S3-381-125 | Mounting fixture Ø 125 |
| S3-381-150 | Mounting fixture Ø 150 |

## GLUED END

The glued end is used on installations where you don´t want, or have the possibility to cut away the far end of the liner. For example from the house out to the main. The Omaplata hose is used as an extension of the liners coating that protrudes the liners far end, and is retracted after curing.
This leaves the liner open and there is no need for further work.

| Omaplata | |
|---|---|
| S3-304-050 | Omaplata Ø 50 |
| S3-304-075 | Omaplata Ø 75/67-105 |
| S3-304-100 | Omaplata Ø 100/90-141 |
| S3-304-150 | Omaplata Ø 150/130-205 |


## STEAM GLUE

Steam Glue is a thermal adhesive that is cured at about 60°Celcius. It is used for gluing the Omaplata to the liner coating, when making a glued end. A heat gun is used to cure the glue. Steam glue can also be used in applications where heat curing is used.

| Steam glue | |
|---|---|
| S5-151-011 | Steam Glue 50ml |
| S5-151-010 | Steam Glue 300 ml |