

Cast-in Fire Collars & Floor Waste Kit

# **High Cast-in Collars**

FIREFLY cast-in fire collars are engineered to minimise the labour involved in passively fire stopping plumbing pipe penetrations in on-site poured concrete floors. By affixing the base to the formwork on site, the plumbing pipe penetration is fully catered for with passive fire protection. This eliminates the necessity of post-pour core drilling of penetrations and retrofitting a fire collar. Once the floor is poured and the formwork removed, simply cut off the top of the cast in collar and install the pipe.

# Suitable for fitting within:

Solid concrete or FIREFLYMortar floors

#### **Features:**

- 250 mm overall height
- · Sturdy construction for casting in
- Multiple fixing positions
- Made from recycled PP





# Low Cast-in Collars

FIREFLY low cast-in collars are designed to suit 40-150 mm uPVC pipe penetrations. The low cast-in collar is installed in a similar manner to the standard cast-in collar. The main difference with the low cast-in collar is that the pipe acts as the riser to the required height during the concrete pour. The pipe should be capped to prevent concrete entering the pipework during construction.

# Suitable for fitting within:

Solid concrete or FIREFLYMortar floors

#### **Features:**

- · Sturdy construction for casting in
- Multiple fixing positions
- · Made from recycled PP





# Cast-in Fire Rated Floor Waste Kits

FIREFLY cast-in floor waste kits provide a fully fire rated solution for floor waste penetrations.

#### Kit Includes:

- Cast-in fire collar (high or low)
- · Fire rated floor waste system

# Suitable for fitting within:

Solid concrete or FIREFLYMortar floors

#### **Features:**

- · Sturdy construction for casting in
- Multiple fixing positions
- Unique fire rated floor waste system





# **Sud Valve**

FIREFLY's Sud Valve offers a simple solution to a frequent issue. It stops soap suds from bubbling up through a floor grate in both commercial and residential settings, keeping the area safe without compromising on flow rates.

# **Features:**

- Can be retrofit in a variety of 100 mm and 80 mm floor waste installations
- Stops suds rising through floor grate
- Prevents insects from passing through grates
- Minimises floor waste water noise in bathrooms



# Installation

# uPVC Stack Pipes, High Collars | H Series

# Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

### Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

### Step 3



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H1	40 mm uPVC pipe	2.4 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H2	50 mm uPVC pipe	2.0 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H3	65 mm uPVC pipe	2.5 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/180/180
H4	80 mm uPVC pipe	2.9 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/180/180
H5	100 mm uPVC pipe	3.5 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/180/180
H6	150 mm uPVC pipe	4.5 mm	FIREFLY FCC-150H	Min 120 mm thick solid concrete floor	Up to -/180/180

# uPVC Stack Pipes, Low Collars | L Series

## Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

## Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

# Step 3



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H7	40 mm uPVC pipe	2.4 mm	FIREFLY FCC-40L	Min 120 mm thick solid concrete floor	Up to -/240/240
Н8	50 mm uPVC pipe	2.0 mm	FIREFLY FCC-50L	Min 120 mm thick solid concrete floor	Up to -/180/180
H9	65 mm uPVC pipe	2.5 mm	FIREFLY FCC-65L	Min 120 mm thick solid concrete floor	Up to -/180/180
H10	80 mm uPVC pipe	3.0 mm	FIREFLY FCC-80L	Min 120 mm thick solid concrete floor	Up to -/180/180
H11	100 mm uPVC pipe	3.5 mm	FIREFLY FCC-100L	Min 120 mm thick solid concrete floor	Up to -/180/180
H12	150 mm uPVC pipe	4.5 mm	FIREFLY FCC-150L	Min 150 mm thick solid concrete floor	Up to -/120/120

# uPVC Stack Pipes with Joint (Socket) within the collar, High Collars | H Series

#### Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

## Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

#### Step 3



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H13	40 mm uPVC pipe with socket within the collar	2.4 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H14	50 mm uPVC pipe with socket within the collar	2.0 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H15	65 mm uPVC pipe with socket within the collar	2.5 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/120/120
H16	80 mm uPVC pipe with socket within the collar	3.0 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/180/180
H17	100 mm uPVC pipe with socket within the collar	3.5 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/180/180

# uPVC Stack Pipes with Joint (Socket) within the collar, Low Collars | L Series

## Step 1

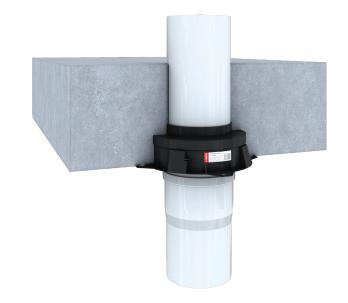
Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

## Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

#### Step 3

For H22a, H22b, H22c - the maximum annular gap between the pipe and collar is 10 mm and is protected by a FIREFLY Mastic sealant on the top side.



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H18	40 mm uPVC pipe with socket within the collar	2.4 mm	FIREFLY FCC-50L	Min 120 mm thick solid concrete floor	Up to -/120/120
H19	50 mm uPVC pipe with socket within the collar	2.0 mm	FIREFLY FCC-50L	Min 120 mm thick solid concrete floor	Up to -/120/120
H20	65 mm uPVC pipe with socket within the collar	2.5 mm	FIREFLY FCC-65L	Min 120 mm thick solid concrete floor	Up to -/180/180
H21	80 mm uPVC pipe with socket within the collar	3.0 mm	FIREFLY FCC-80L	Min 120 mm thick solid concrete floor	Up to -/180/180
H22	100 mm uPVC pipe with socket within the collar	3.5 mm	FIREFLY FCC-100L	Min 150 mm thick solid concrete floor	Up to -/180/180

# HDPE Stack Pipes, High Collars | H Series

#### Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

#### Step 3



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H23	40 mm HDPE pipe	3.6 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H24	50 mm HDPE pipe	3.0 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/120/120
H25	56 mm HDPE pipe	3.0 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/120/120
H26	63 mm HDPE pipe	3.0 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/120/120
H27	75 mm HDPE pipe	3.0 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/120/120
H28	90 mm HDPE pipe	3.5 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/120/120
H29	110 mm HDPE pipe	4.5 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/120/120

# HDPE Stack Pipes, Low Collars | L Series

# Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H30	110 mm HDPE pipe	4.5 mm	FIREFLY FCC-100L	Min 120 mm thick solid concrete floor	Up to -/180/180

# Plastic Pipe (SDR 7.4) Stack Pipes, High Collars | H Series

#### Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

# Step 3



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H31	40 mm PP-R Plastic pipe (SDR 7.4)	6.2 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/120/120
H32	110 mm PP-R Plastic pipe (SDR 7.4)	16.0 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/180/180

# RAUPIANO PP-MD Stack Pipes, High Collars | H Series

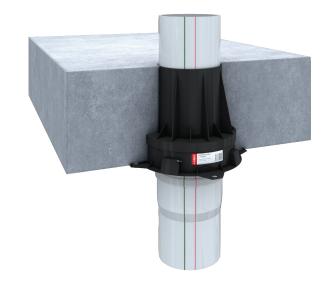
#### Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

# Step 3



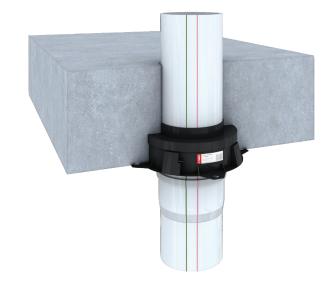
ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H33	40 mm PP- MD Raupiano pipe	2.1 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H34	50 mm PP- MD Raupiano pipe	1.8 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H35	75 mm PP- MD Raupiano pipe	1.9 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/180/180
H36	110 mm PP-MD Raupiano pipe	2.8 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/180/180

# RAUPIANO PP-MD Stack Pipes, Low Collars | L Series

# Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H37	110 mm PP-MD Raupiano pipe	2.8 mm	FIREFLY FCC-100L	Min 120 mm thick solid concrete floor	Up to -/180/180

# D-BLUE PP-MD Stack Pipes, High Collars | H Series

#### Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

## Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.

# Step 3

For H38a, H38b, H39a, H39b, H40a, H40b, H40c, H42a, H42b, H42c - the maximum annular gap between the pipe and collar is 10 mm and is protected by a FIREFLY Mastic sealant on the top side.



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H38	40 mm D-Blue PP-MD pipe	1.8 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/120/120
H39	50 mm D-Blue PP-MD pipe	1.8 mm	FIREFLY FCC-50H	Min 120 mm thick solid concrete floor	Up to -/180/180
H40	75 mm D-Blue PP-MD pipe	1.9 mm	FIREFLY FCC-80H	Min 120 mm thick solid concrete floor	Up to -/180/180
H41	90 mm D-Blue PP-MD pipe	2.8 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/120/120
H42	110 mm D-Blue PP-MD pipe	3.6 mm	FIREFLY FCC-100H	Min 120 mm thick solid concrete floor	Up to -/180/180

# D-BLUE PP-MD Stack Pipes, Low Collars | L Series

# Step 1

Fix FIREFLY collar to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H43	110 mm D-Blue PP-MD pipe	3.6 mm	FIREFLY FCC-100L	Min 120 mm thick solid concrete floor	Up to -/180/180

# uPVC Floor Waste and Pipe Socket (Joint), High Collars | H Series

# Step 1

Fix FIREFLY collar with floor waste kit with Sud Valve to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

# Step 2



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H44	uPVC 80 mm floor waste with socket within the collar	3.0 mm	FIREFLY FCC-80H + SV80 floor waste kit with Sud valve	Min 120 mm thick solid concrete floor	Up to -/240/240
H45	uPVC 100 mm floor waste with socket within the collar	3.5 mm	FIREFLY FCC-100H +SV100 floor waste kit with Sud valve	Min 120 mm thick solid concrete floor	Up to -/240/240

# uPVC Floor Waste without Socket, Low Collars | L Series

# Step 1

Fix FIREFLY collar with floor waste kit with Sud Valve to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

#### Step 2



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H46	uPVC 100 mm floor waste with (no joint / socket within the collar)	3.5 mm	FIREFLY FCC-100L + SV100 floor waste kit with Sud valve	Min 120 mm thick solid concrete floor	Up to -/180/180

# uPVC Floor Waste and Pipe Socket (Joint), Low Collars | L Series

### Step 1

Fix FIREFLY collar with floor waste kit with Sud Valve to the formwork and pour concrete or FIREFLYMortar of assessed thickness.

### Step 2

Once the concrete or FIREFLYMortar has hardened remove the formwork ensuring the galvanised steel ring is exposed.



ID	Service (Pipe type)	Wall Thickness up to (mm)	Local Protect ion	Support Construction	FRL
H47	uPVC 80 mm floor waste with socket within the collar	3.0 mm	FIREFLY FCC-80L + SV80 floor waste kit with Sud valve	Min 120 mm thick solid concrete floor	Up to -/180/180
H48	uPVC 100 mm floor waste with socket within the collar	3.5 mm	FIREFLY FCC-100L + SV100 floor waste kit with Sud valve	Min 120 mm thick solid concrete floor	Up to -/180/180

#### Note

All stated figures in the Report tested to AS4072.1:2005 and AS1530.4:2014, by Jensen Hughes FAS121361.