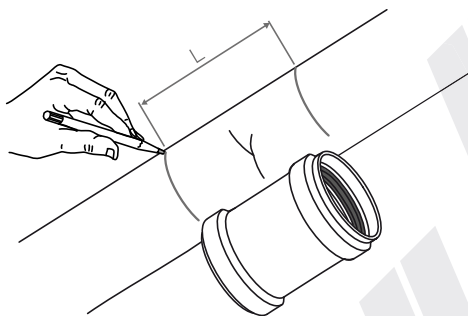


8.2.4 Repair of pipes using sliding sleeves

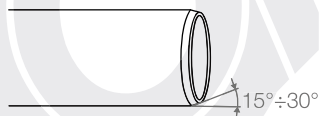
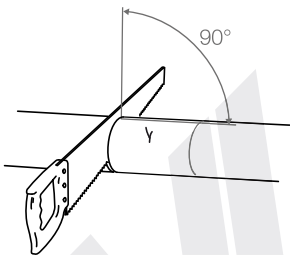
Main characteristics	
Type	This jointing method avails of special sliding sleeves for the repair of damaged pipes. These sliding sleeves are also used for modifying existing pipelines, for example, to install additional fittings such as a branch fitting.
Applicability	Valsir® HDPE, PP/PP3, Triplus®, and Silere® waste systems
Diameters	160 to 315 mm (HDPE), 32 to 160 mm (PP/PP3), 32 to 250 mm (Triplus®), 58 to 160 mm (Silere®)
Removable	Yes
Tension resistant	No
Connection difficulty	Medium
Necessary tools	Pipe cutter, chamfering tool, lubricant, pencil, ruler



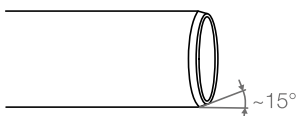
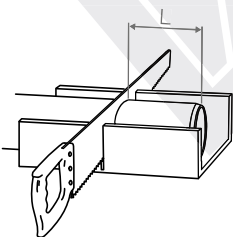
Installation instructions



- 1) Indicate the area to be cut at a distance L that is at least equal to the length of the sliding sleeve and which includes the damaged area.

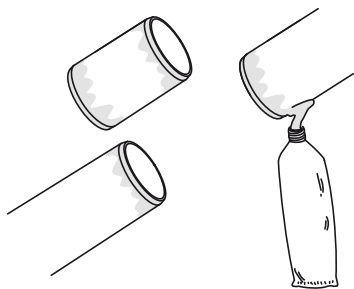


- 2) Cut the section of the pipeline with a suitable pipe cutter or with a fine-tooth saw that is suitably guided to guarantee a perpendicular cut. Chamfer and bevel the resulting pipe ends of the pipeline to an angle of roughly 15° to 30° using a suitable chamfering tool or a fine file. The chamfered surface must be smooth to avoid damaging the ring seal inside the sliding sleeve.

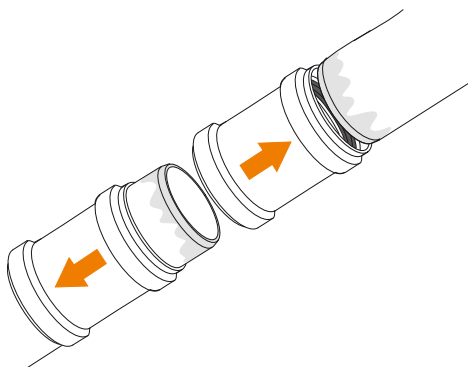


- 3) Cut a piece of pipe of length L with a suitable pipe cutter or with a fine-tooth saw that is suitably guided to guarantee a perpendicular cut. Chamfer and bevel the ends of the piece of pipe to an angle of roughly 15° to 30° using a suitable chamfering tool or a fine file. The chamfered surface must be smooth to avoid damaging the ring seal inside the sliding sleeves.

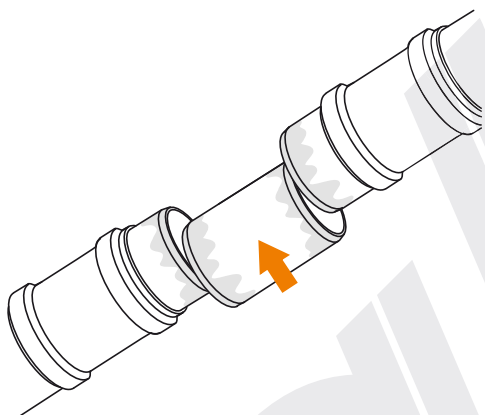
## Installation instructions



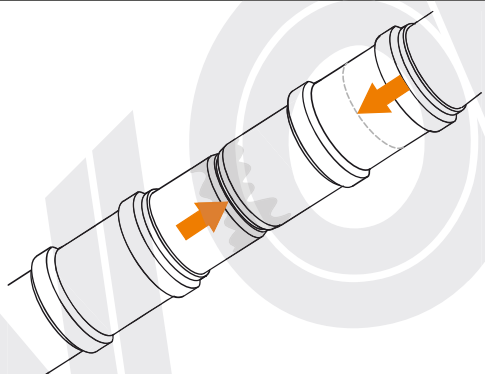
- 4) Spread the ends of the pipeline and the piece of pipe with a suitable Valsir® lubricant (do not use mineral oils or grease).



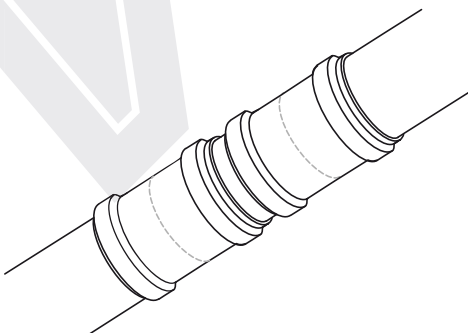
- 5) Position the sliding sleeves by inserting them in the space created between the two ends of the pipeline and slide them onto the pipe ends.



- 6) Position the piece of pipe in the space created between the two ends of the pipeline.



- 7) Slide the two sleeves toward the piece of pipe.



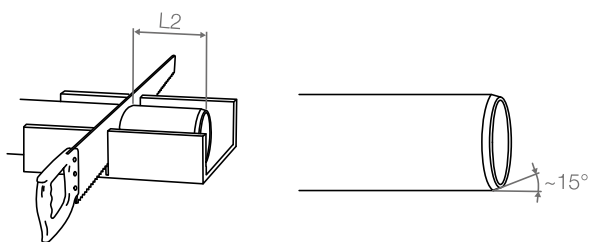
- 8) The two sliding sleeves must be positioned perfectly over the lines where the pipes were cut.

### 8.2.5 Modification of pipelines using sliding sleeves

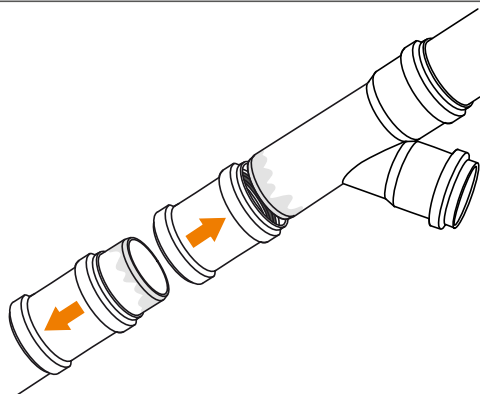
Main characteristics	
Type	This jointing method avails of special sliding sleeves for the modification of existing pipelines, for example, to add a branch fitting.
Applicability	Valsir® HDPE, PP/PP3, Triplus®, and Silere® waste systems
Diameters	160 to 315 mm (HDPE), 32 to 160 mm (PP/PP3), 32 to 250 mm (Triplus®), 58 to 160 mm (Silere®)
Removable	Yes
Tension resistant	No
Connection difficulty	Medium
Necessary tools	Pipe cutter, chamfering tool, lubricant, pencil, ruler



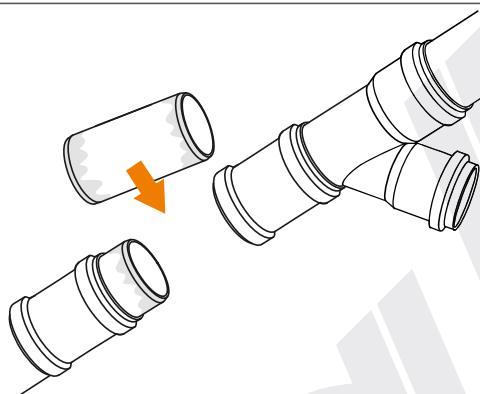
Installation instructions	
	1) Indicate the area to be cut at a distance L1 at least equal to the length of the fitting to be inserted (in the example the branch fitting) plus a length equal to three times the pipe diameter.
	2) Cut the section of the pipeline with a suitable pipe cutter or with a fine-tooth saw, suitably guided to guarantee a perpendicular cut. Chamfer and bevel the resulting ends of the pipeline to an angle of roughly 15° to 30° using a suitable chamfering tool or a fine file. The chamfered surface must be smooth to avoid damaging the ring seal inside the fittings that will be used.
	3) Spread the ends of the pipeline and the fitting with suitable Valsir® lubricant (do not use mineral oils or grease).
	4) Insert the fitting onto the end of the pipeline to maximum socket depth and measure the resulting distance L2.



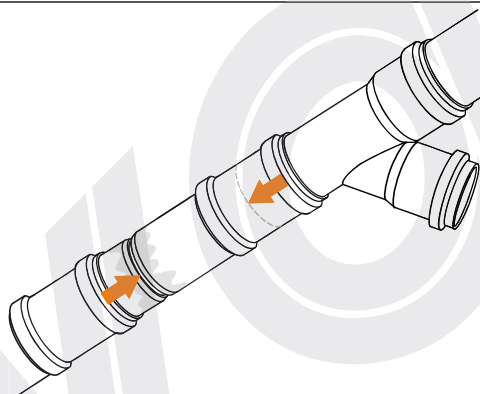
- 5) Cut a piece of pipe of length L2 with a suitable pipe cutter or with a fine-tooth saw, suitably guided to guarantee a perpendicular cut. Chamfer and bevel the ends of the piece of pipe to an angle of roughly 15° to 30° using a suitable chamfering tool or a fine file. The chamfered surface must be smooth to avoid damaging the ring seal inside the sliding sleeve.



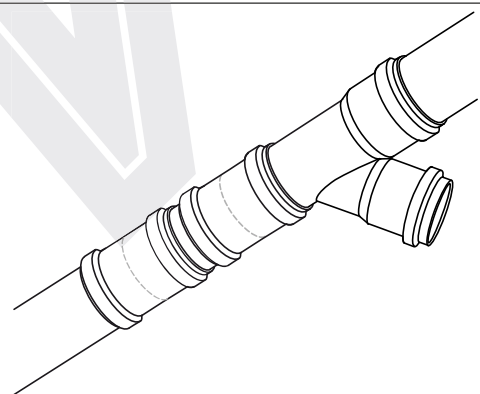
- 6) Position the sliding sleeves by inserting them in the space created between the pipeline and fitting that was inserted previously and sliding each of them onto the two ends. If the spigot of the fitting is not long enough to accommodate the sliding sleeve, position both of them on the end of the pipeline, the sleeve will then be slid to the necessary position above the fitting.



- 7) Position the piece of pipe in the space created between the two ends of the pipeline.



- 8) Slide the two sleeves toward the piece of pipe.



- 9) The two sliding sleeves must be positioned perfectly over the lines where the pipes were cut.