

Lindab Vihmaveesüsteem

Lindab Rainline™

Paigaldusjuhend

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Enne alustamist

Vihmaveesüsteemi suuruse määrab kogu katuse pindala. Mida suurem on katuse pind, seda rohkem vett süsteem vastu võtma peab. Väga oluline on katust mõõta täpselt ja arvutada välja vihmaveesüsteemi suuruse. Soovitame vihmaveesüsteemi kalkuleerimisel kasutada meie esindaja abi. Palun külastage abi ja informatsiooni saamiseks ka meie veebilehte www.lindab.ee

Katuse pinna mõõtmine

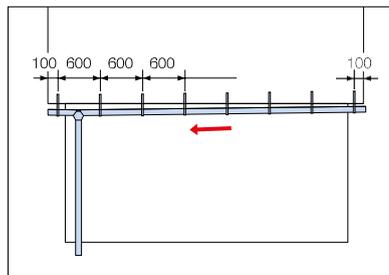
On olemas erinevat tüüpi katuseid ja iga katuseosa tuleb mõõta eraldi: laius korda kõrgus. Kui katuse pind on alla 50 m², võid kasutada renni mõõduga 100 mm ja toru läbimõõduga 75 mm. Kui katuse pind on vahemikus 50-100 m², kasuta renni mõõduga 125 mm ja toru läbimõõduga 87 mm. Kui katuse pind on suurem kui 100 m², kasuta

renni 150 mm ja toru läbimõõduga 100 mm või renni 190 mm ja toru 111/120 mm. Kui katusel on erineva suurusega pindu, tuleks kasutada kõige suurema pinna mõõte.

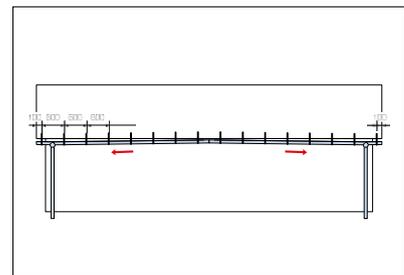
Rennikandurite ja torude kogus

Rennikandurid peaksid olema paigaldatud vahemaaga 600 mm. Alguse ja lõpu kandur paigaldatakse 100 mm kaugusele katuse äärest.

Renni kalle algusest kuni toruni peaks olema vähemalt 2,5 mm/m. Kalkuleeri, mitu rennikandurit on vaja igale katuse osale (näit. 10 m/0,6 m +1 = 18 kandurit). Iga toru võtab vastu maksimaalselt 10 m renni jooksu (hoone räästa pikkus). Esteetilisel põhjusel või üle 10 m räästa pikkuse korral võib panna toru mõlemasse hoone välisnurka.



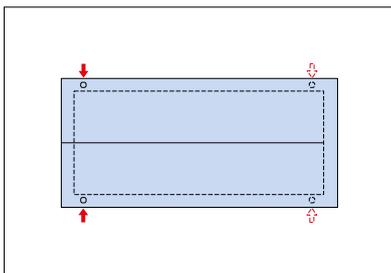
Üks toru katusele pikkusega kuni 10 m



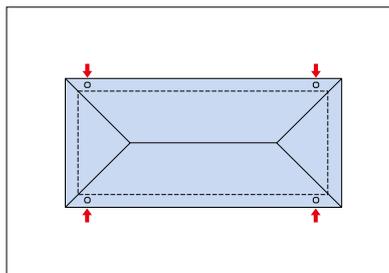
Kaks toru katusele pikkusega üle 10 m

Kuhu paigaldada toru

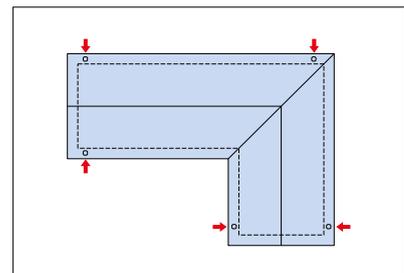
Allpool olev pilt näitab soovituslikult toru paigaldamist erinevatele hoonetele.



Viilkatus. 1 või 2 ühele küljele.



Kelpkatus



L-kujuline katus

Paigaldusjuhend

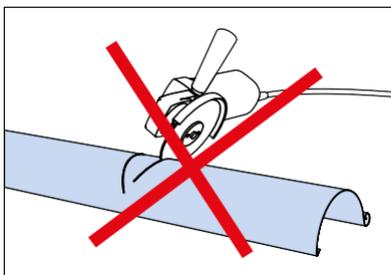
Transport, ladustamine, lahti-pakkimine

Kindlusta et vihmaveesüsteemi osad oleksid kaitstud transportimise ajal, ladustamisel ja lahtipakkimisel. Kui ei, võib pinnakate saada vigastada või torud ja rennid deformeeruda. Ladusta rennid ja torud kindlale alusele.

Ilma pinnakatteta osad tuleb lahti pakkida ja sorteerida kuivas ja ventileeritud kohas.

Lõikamine

Renne või torusid võib lõigata rauasaega või plekikäridega kindlal aluspinnal. Ära kunagi kasuta nurklihvijat (relakat)! See kuumutab terase kõrgele temperatuurile ning kahjustab seeläbi pinnakatet ja tsingikihti. Samuti kahjustub pinnakate lendlevatest kuumadest metalliosakestest.



Ära kunagi kasuta nurklihvijat

Järelhooldus

Kui pinnakate on saanud vigastada, paranda see Lindab'i parandusvärviga, et pikendada vihmaveesüsteemi eluiga. Kasuta svammi või Lindab'i värvipintsli.

Hooldus

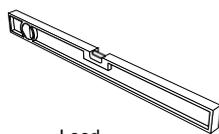
Kui soovid hoida vihmaveesüsteemi heas korras, tee sellele paar korda aastas ülevaatus. Puhasta rennid ja torud lehtedest ja okastest. Pese vee ja lahja pesuvahendiga. Ära kasuta pesu ajal tugevat survet.

Tööriistad

Lindab'i vihmaveesüsteemi saab paigaldada tavaliste käsitööriistadega nagu tangid, haamer, rauasaag, kruvikeeraja, mõõdulint ja nõör. Rennikandurite väänamiseks on vaja kanduripainutajat. Võta ühendust lähima Lindab'i esindusega ja Sulle laenutatakse see.

Kinnitusvahendid

Kinnituskruvisid on vaja renni- ja torukandurite kinnitamiseks. Soovitav on kasutada roostevabu kruve. Kruvi tüüp peab vastama materjalile, mille sisse kruvi keeratakse. Torukandurid paigaldatakse hoone fassaadi külge. Kontrolli, kas see on puit, krohv või kivi.



Lood



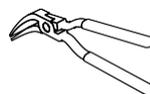
Mõõdulint



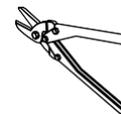
Pliats



Kruvikeeraja



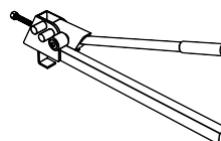
Plekitangid



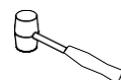
Plekikärid



Rauasaag

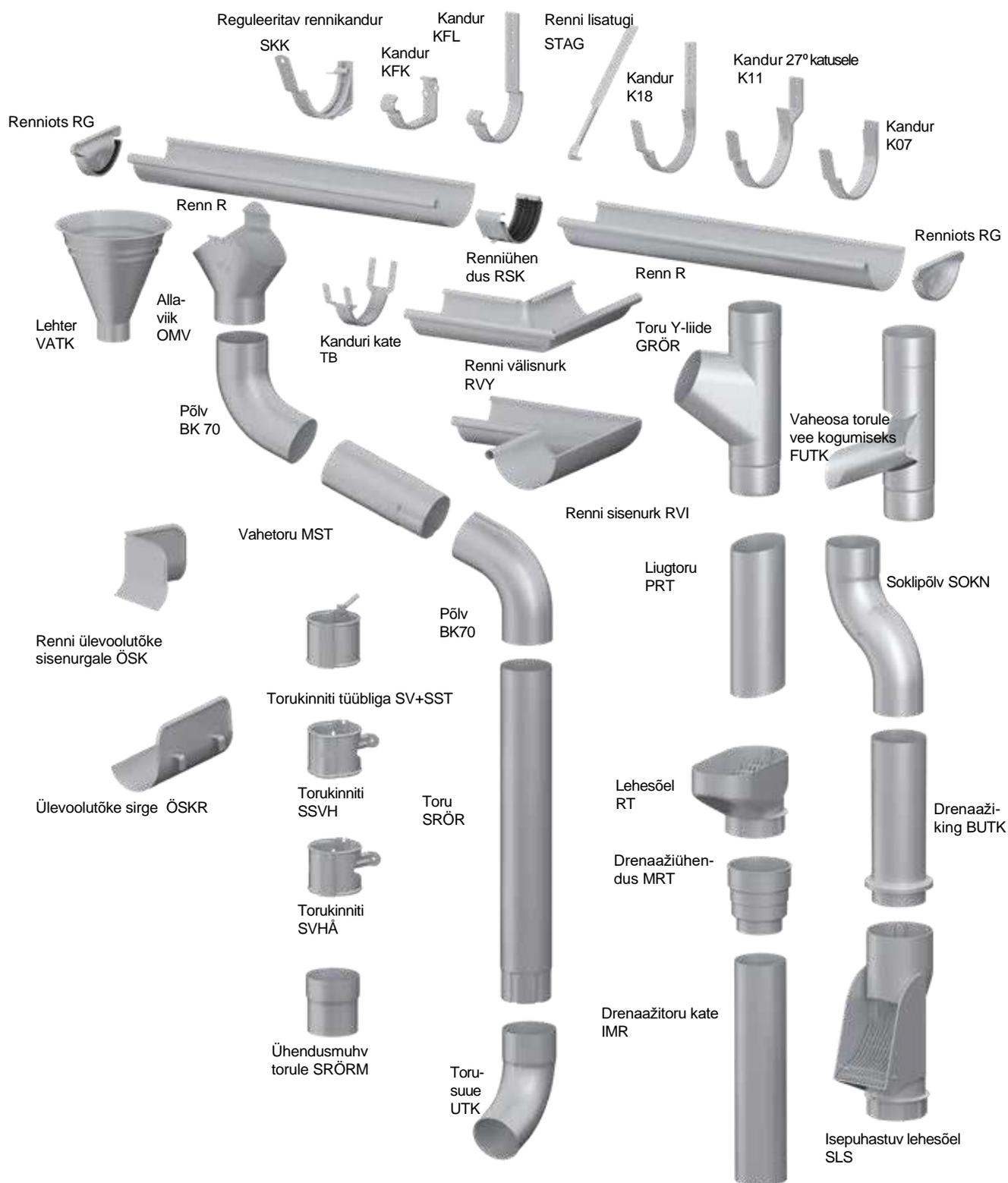


Kanduripainutaja

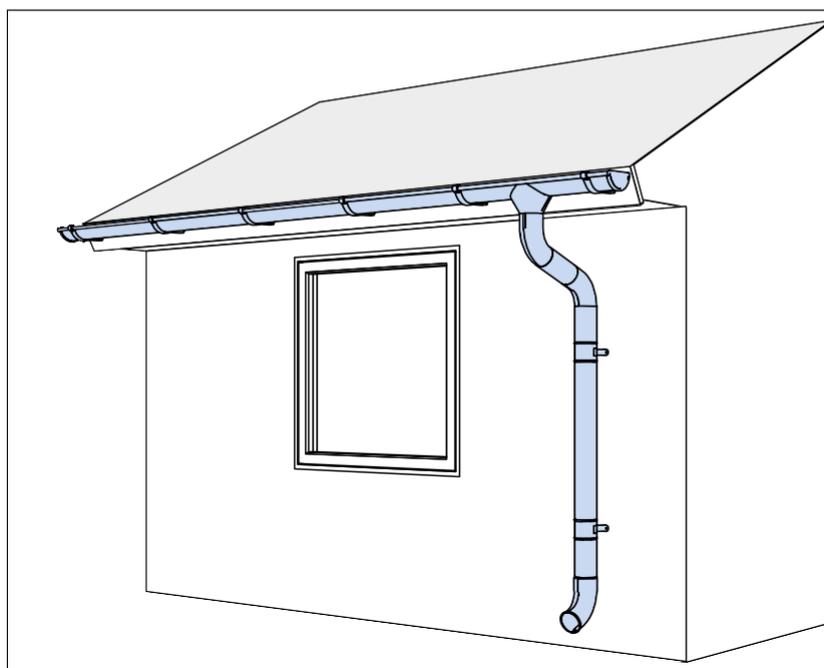
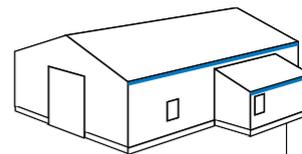


Kummihaamer

Toodete ülevaade

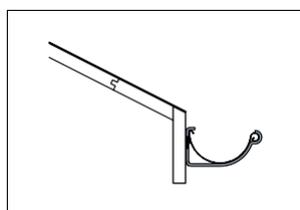


Paigaldusjuhend – Vihmaveesüsteem

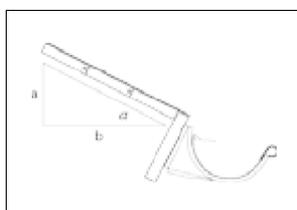


Katuse tüüp

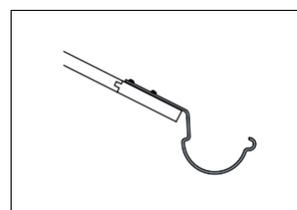
Olenevalt katuse konstruktsioonist on võimalik kasutada erinevat tüüpi rennikandureid. Reguleeritavat rennikandurit kasutatakse vastavalt järgnevale paigaldusjuhendile. Teiste kandurite paigaldus on samuti näidatud eraldi juhendites. Kandurid mida saab kasutada on järgmised:



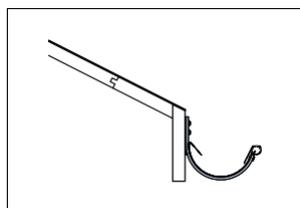
Lindab KFK rennikandur



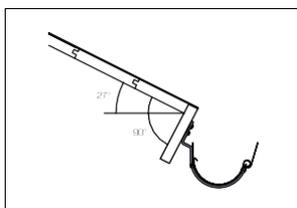
Lindab SKK reguleeritav rennikandur



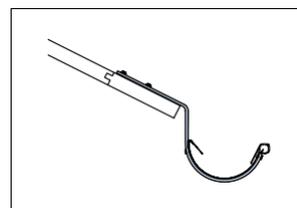
Lindab KFM/KFL rennikandur



Lindab K07 rennikandur



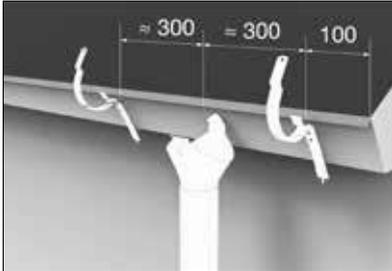
Lindab K11 rennikandur



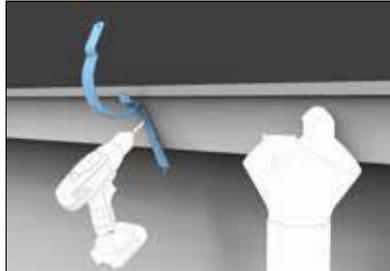
Lindab K16/K21 rennikandur

Paigaldusjuhend - Vihmaveesüsteem

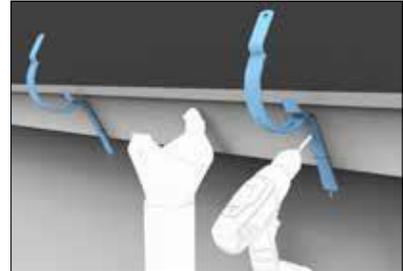
Rennikandurite paigaldamine



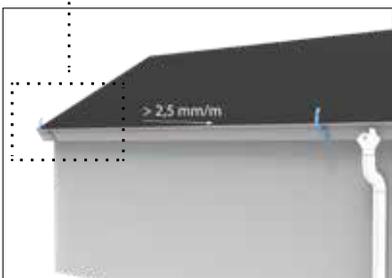
Märgi rennikanduri SKK asukoht allaviigu suhtes.



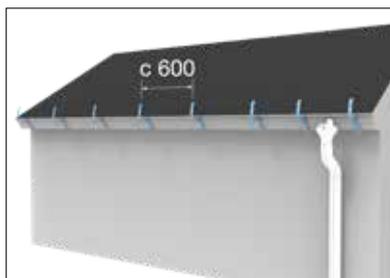
Kinnita "alumine kandur" 300 mm allaviigust vasakule.



Kinnita kandur allaviigust paremal pool 2,5 mm kõrgemale kui madalaim kandur.



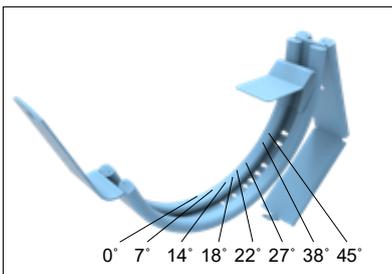
Kinnita "ülemine kandur" räästa vastasossa. Tõus alates allaviigust peaks olema 2,5 mm/m.



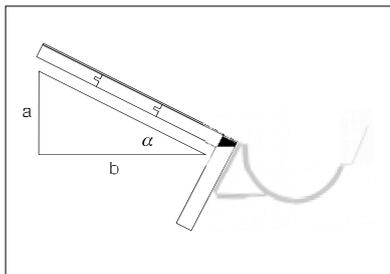
Kinnita teised kandurid nõõri järgi iga 600 mm tagant.



Alumise ja ülemise kanduri vahele paigalda nõõr. See aitab paigaldada teisi kandureid.

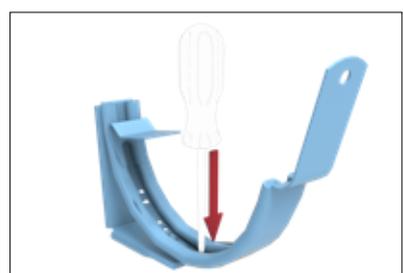
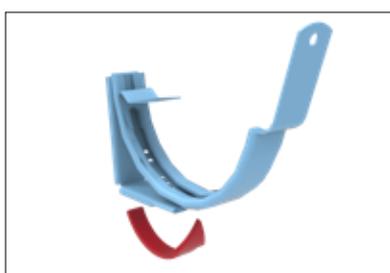
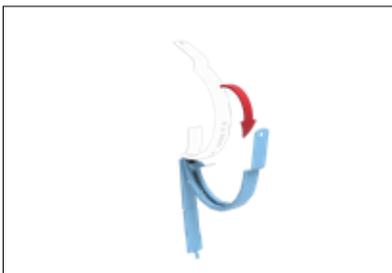


SKK rennikandurit saab kasutada erinevate kalletega katustele.



Arvuta katuse kalle ja kinnita kandur vastavalt.

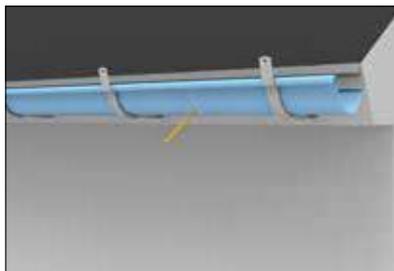
		α
1	1	45°
1	1,25	38°
1	2	27°
1	2,5	22°
1	3	18°
1	4	14°
1	8	7°
1	∞	0°



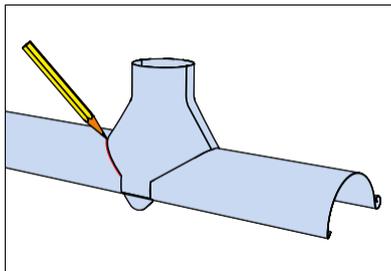
Kasuta kruvikeerajat, et painutada klamber ettepoole madala kalde korral ja tahapoole, kui kalle on $\alpha \geq 22^\circ$.

Paigaldusjuhend - Vihmaveesüsteem

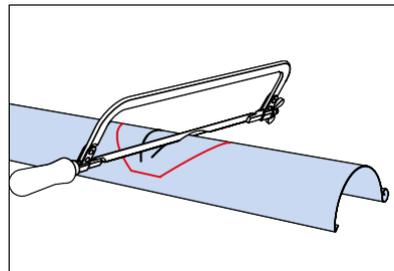
Renni paigaldusjuhend



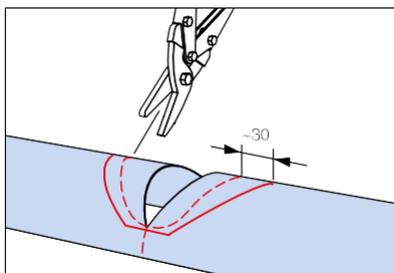
Aseta renn kanduritesse ning märgi allaviigu OMV asukoht rennile.



Kasuta allaviiku šabloonina.



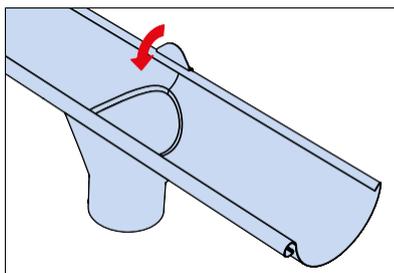
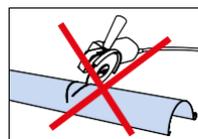
Renni sisse augu tegemiseks kasuta rauasaagi.



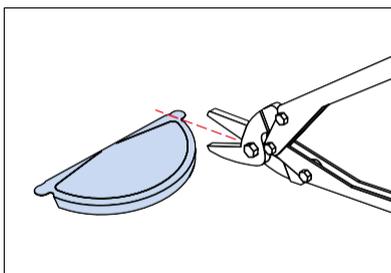
Viimistle auk plekikäärdega mööda joonisel näidatud punktiiri.



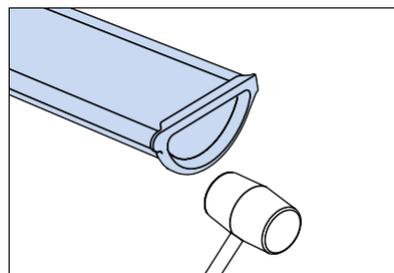
Vee sujuva voolamise tagamiseks painuta servad haamriga.



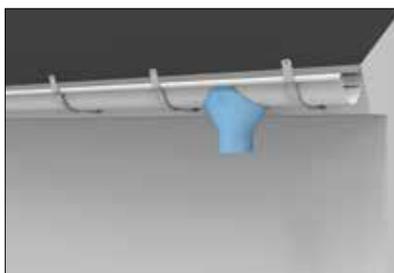
Allaviik kinnitub lihtsalt rennile.



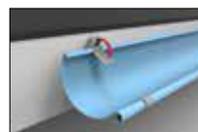
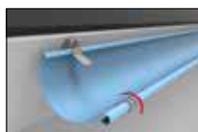
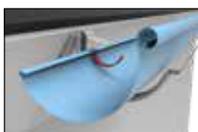
Lõika või painuta renniotsa kõrv mida ei kasutata



Renniots RG on isetihenduv. Kasuta kummihaamrit renniotsa kinnitamiseks.

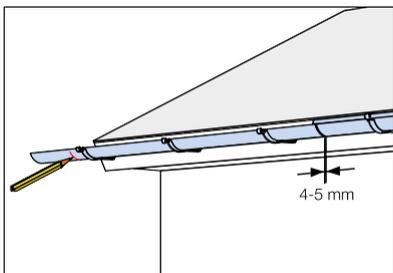


Aseta renn kanduritesse.

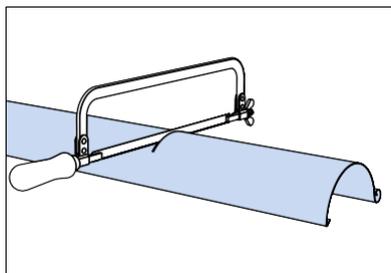


Paigaldusjuhend - Vihmaveesüsteem

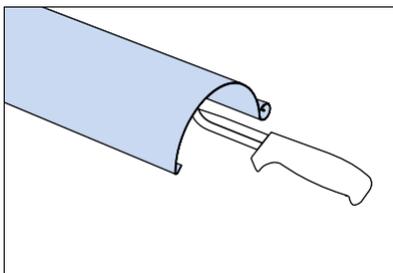
Renniühendus



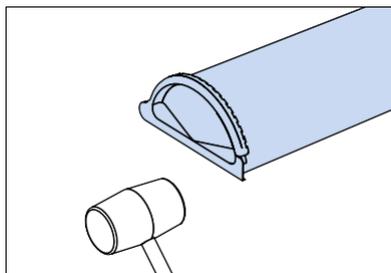
Aseta renn kanduritesse ja märgi vajalik pikkus.



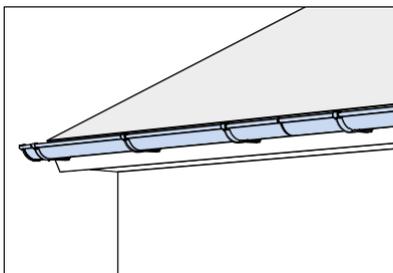
Renni lõikamiseks kasuta rauasaagi.



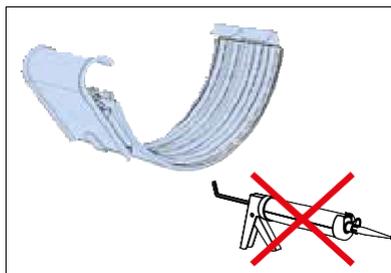
Eemalda metallinaastud.



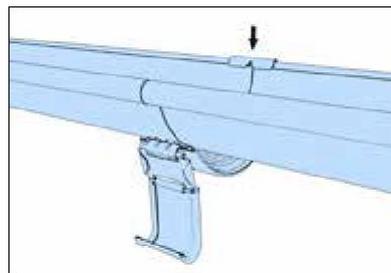
Paigalda renniots RG.



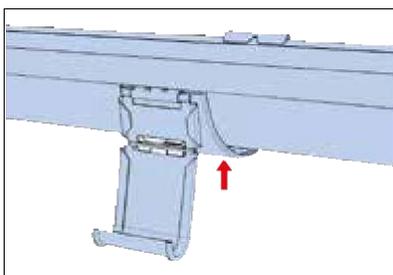
Aseta renn kanduritesse.



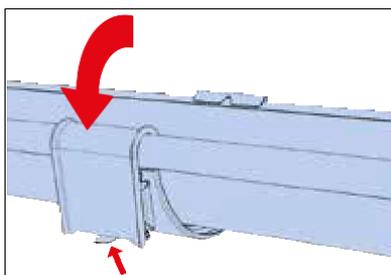
Rennide ühendamiseks kasuta isetihenduvat renniühendust RSK. Silikooni ei tohiks kasutada.



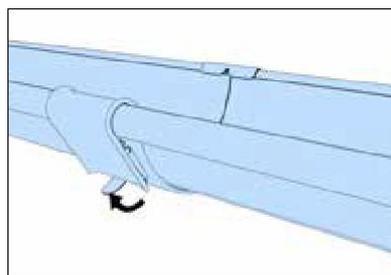
Aseta renniühendus renni peale.



Vajuta tihend vastu renni.



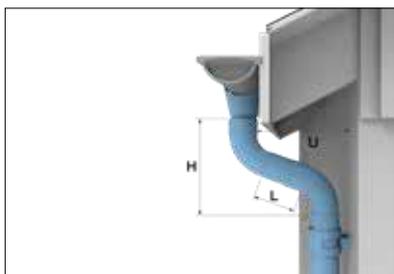
Sulge renniühendus



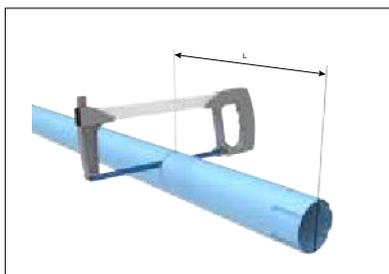
ja lukusta.

Paigaldusjuhend - Vihmaveesüsteem

Torupõlved



Vaata mõõte et leida pikkus vahetorule MST. Kasuta kõrvalolevat tabelit.

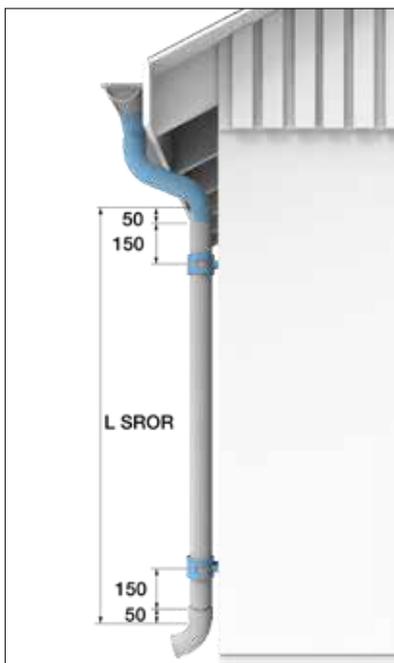


Vahetoru lõikamiseks kasuta rauasaagi. Eemalda noaga teravad metallinaastud.

Vahetoru pikkused 70° torupõlvede puhul

U mm	H mm	L mm
220	275	0
270	290	100
300	300	135
350	320	185
400	340	240
450	355	290
500	375	345
550	395	400
600	410	455
650	430	505
700	450	560
750	465	610
800	485	665
850	505	720
900	520	770
950	540	825
1000	555	880
1050	575	930
1100	595	985
1150	610	1040
1200	630	1090

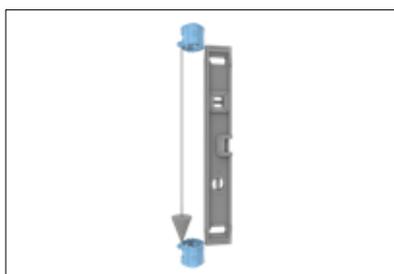
Toru ja torukinniti



Mõõda toru pikkus. Märki torukinnitite SSVU asukohad.



Paigalda torusuu UTK. Kasuta tagaküljel isepuuriivat kruvi.



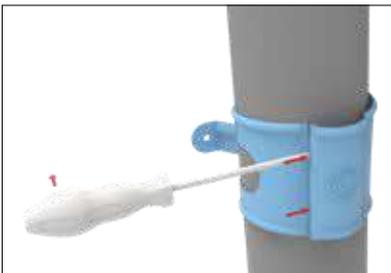
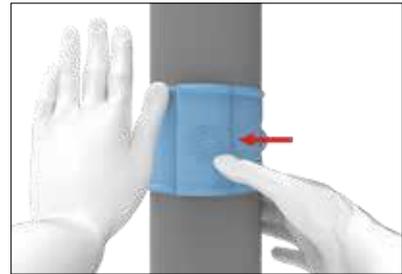
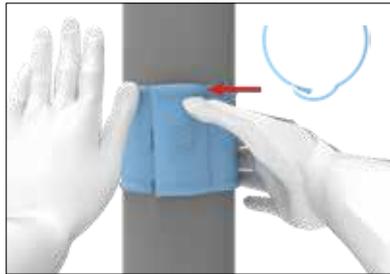
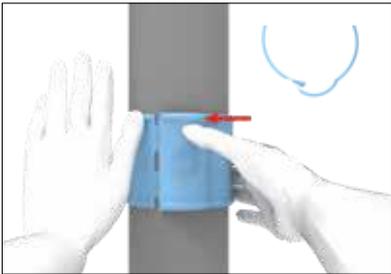
Leia torukandurite asukoht, kasutades vesi- või ripploodi.



Kinnita torukandurid seinalle.

Paigaldusjuhend - Vihmaveesüsteem

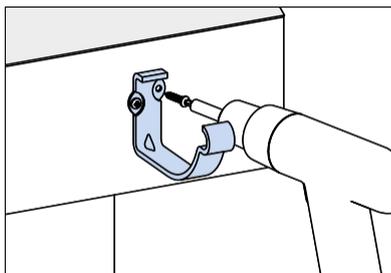
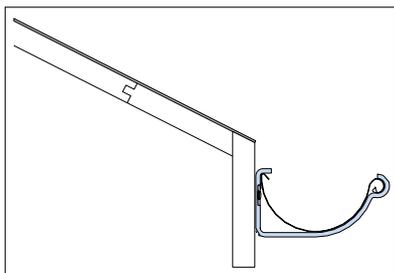
Torukanduri SSVU kinnitamine



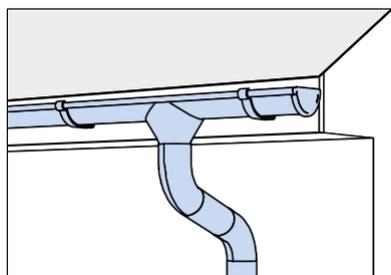
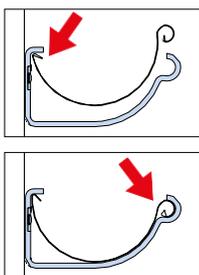
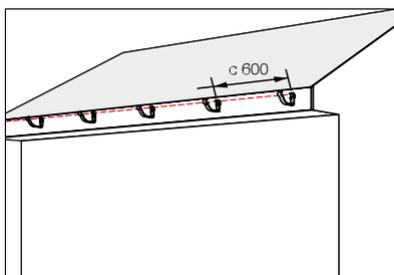
Vajadusel on torukandurit väga lihtne avada.

Paigaldusjuhend - Vihmaveesüsteem

Rennikandur KFK

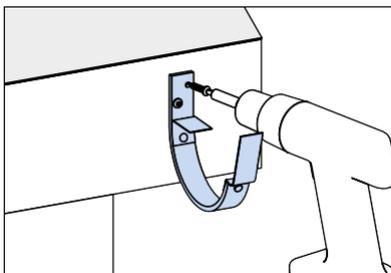
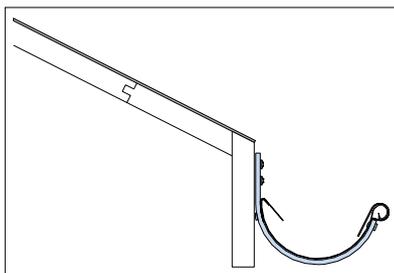


Rennikandurit KFK saab kasutada risti oleva räästalaua puhul.

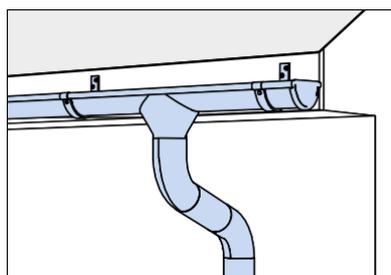
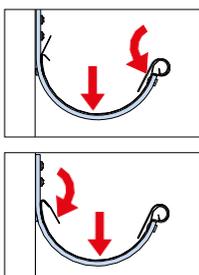
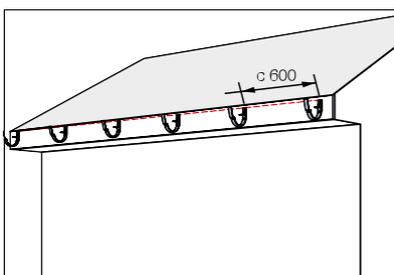


Kalle peaks olema 2,5 mm/m.

Rennikandur K07



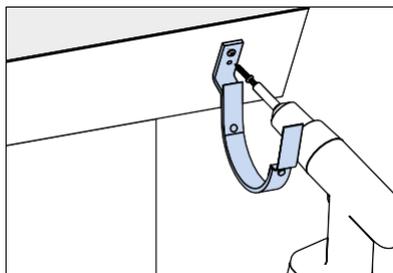
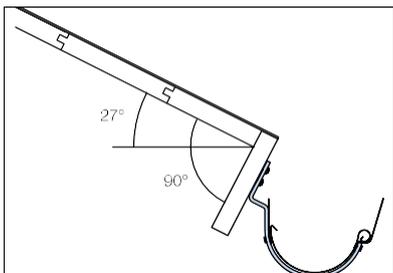
Rennikandurit K07 saab kasutada risti oleva räästalaua puhul.



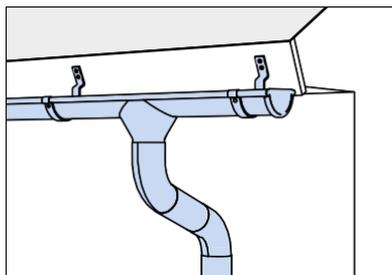
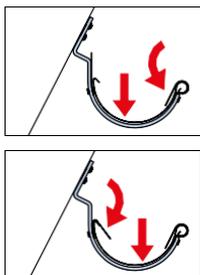
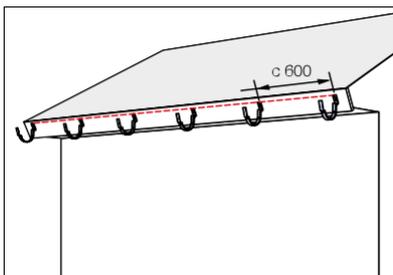
Kalle peaks olema 2,5 mm/m.

Paigaldusjuhend - Vihmaveesüsteem

Rennikandur K11

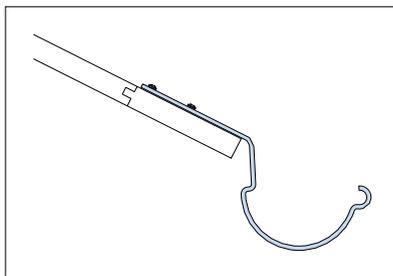


Kasuta rennikandurit K11 27° katusekalde puhul.

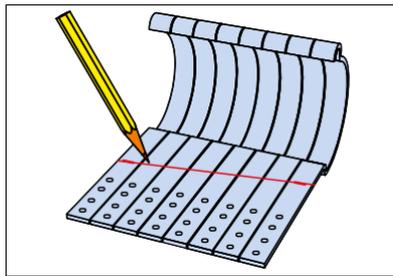


Kalle peaks olema 2,5 mm/m.

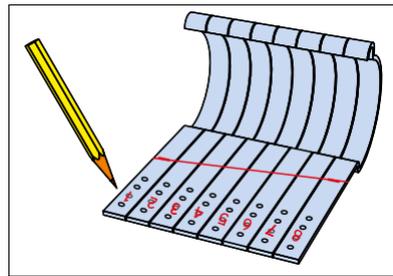
Rennikandur KFM/KFL



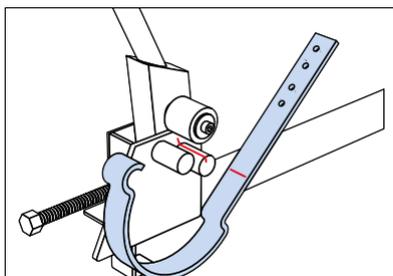
Rennikanduri KFL kasutusvõimalus.



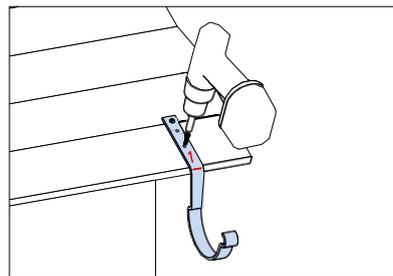
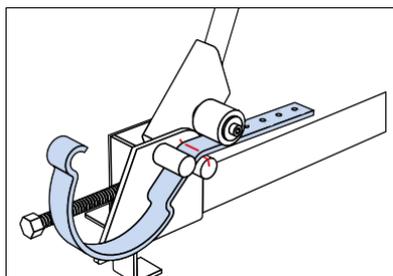
Leia kandurite arv ühele langusele ja märgi kalle 2,5 mm/m.



Nummerda kandurid. 1 on "alumine kandur". Viimane on "ülemine kandur".



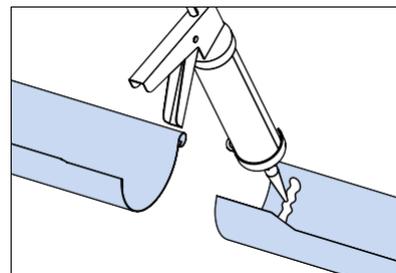
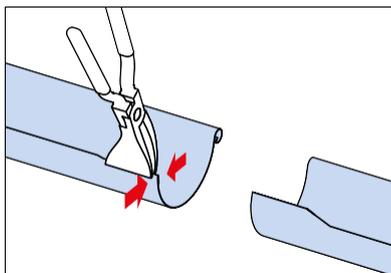
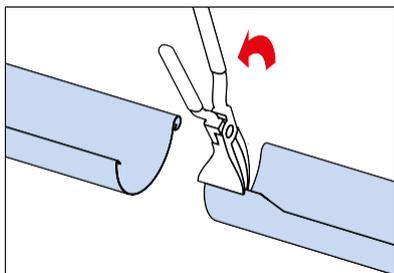
Painuta kandurid vastavalt markeeringule. Miinimum raadius 10 mm.



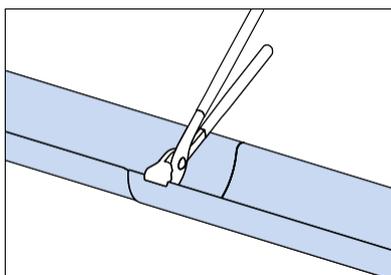
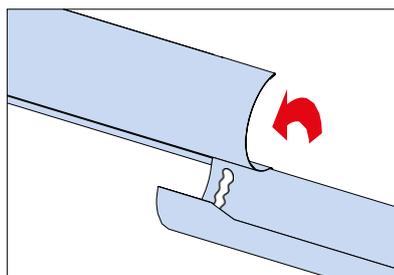
Kinnita kandurid alustades "alumisest kandurist" nr 1.

Paigaldusjuhend - Vihmaveesüsteem

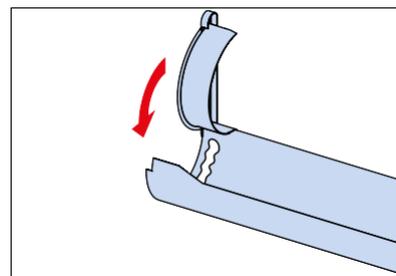
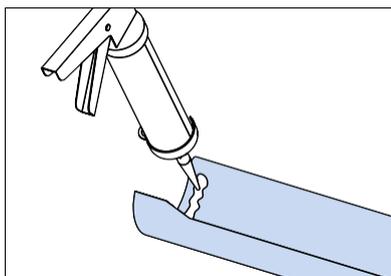
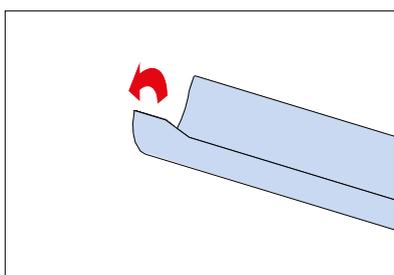
Traditsiooniline rennide ühendamine



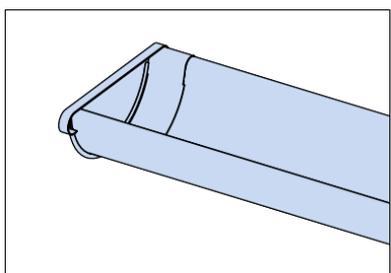
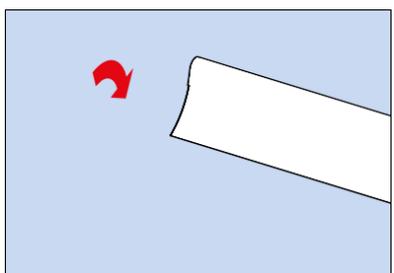
Kasuta silikooni tihendamiseks.



Traditsiooniline renniots RGV ja RGH

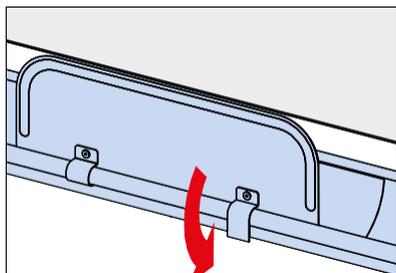


Kasuta silikooni tihendamiseks.

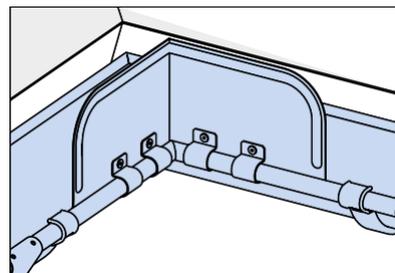
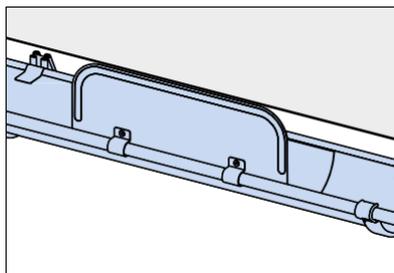


Paigaldusjuhend - Vihmaveesüsteem

Ülevoolutõke ÖSK ja ÖSKR

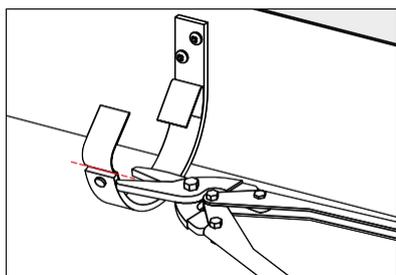


Paigalda ülevoolutõke ÖSKR renni.

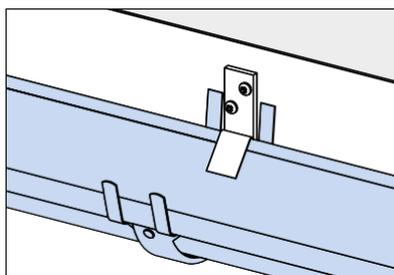


Ülevoolutõke ÖSK renni sisenurgale.

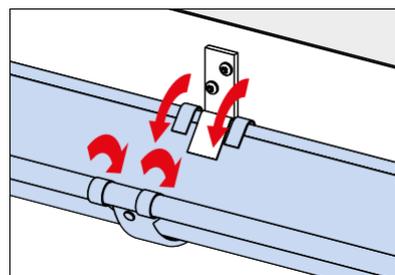
Rennikanduri kate TB



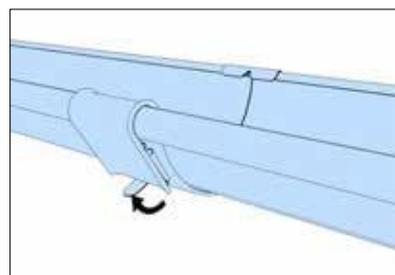
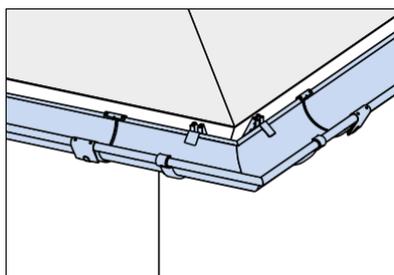
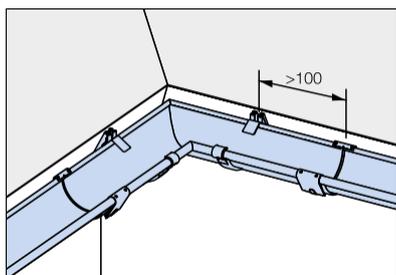
Lõika ära rennikanduri välimine plekiklamber



Aseta rennikanduri kate TB vaba kanduri peale.



Renninurk RVI/RVY



Renniühendus RSK.

Torukinniti SSVU tüübliga SST või SSC



SST või SSC kasutamisel lõika ära SSVU jalad



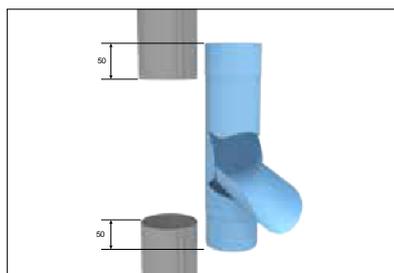
SST...



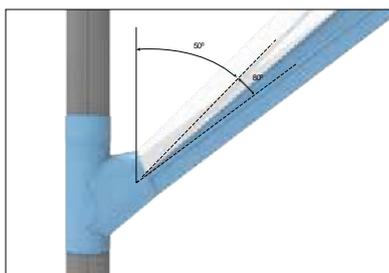
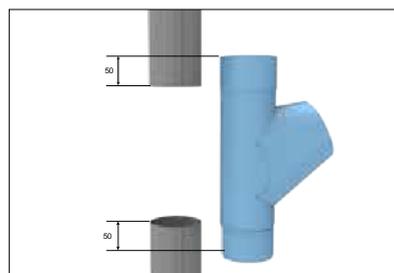
...või SSC.

Paigaldusjuhend - Vihmaveesüsteem

Toru vaheosa FUTK paigaldamine

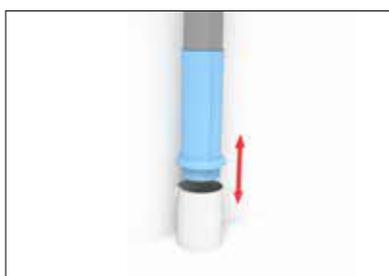


Toru Y-liite GRÖR paigaldamine

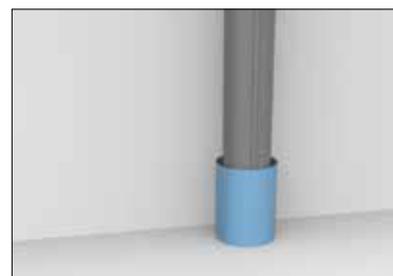


Ühendus harutoruga. Saab kasutada nurgale 50-80°.

Lehesõel DVSIL

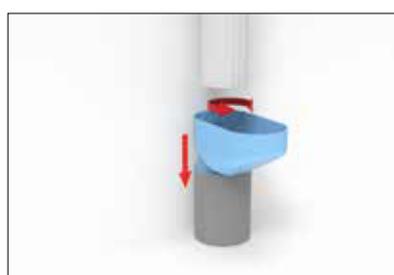


Ühenda dreanaažikingaga BUTK

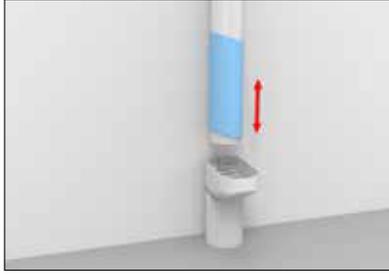


Kasuta vihmaveesüsteemiga sama värvi IMR, et katta maapealne toru.

Lehesõel RT



Paigalda lehesõel dreanaažitorule.



Ühenda liikuva toruga PRT.



Samuti võid kasutada isepuhastuvat lehesõela SLS. Kasuta ühendamiseks dreanaažikinga BUTK.



Enamik meist veedab suurema osa ajast siseruumides. Sisekliima on ülioluline selle jaoks kuidas me ennast tunneme, kui produktiivsed oleme ja kas me püsime terved.

Seetõttu oleme Lindabis seadnud oma kõige olulisemaks eesmärgiks panustada inimeste elu parandavasse sisekliimasse. Selleks arendame energiatõhusaid ventilatsioonilahendusi ja vastupidavaid ehitustooteid. Samuti on meie eesmärk aidata kaasa meie planeedi paremale kliimale, töötades viisil mis on jätkusuutlik nii inimeste kui ka keskkonna jaoks.

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