# voestalpine Sadef

Assembly Guideline FlexPark<sup>®</sup>



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## **General Informations**

Cabling is out of scope of this document and is the responsibility of the voestalpine Sadef customer.

The information given in this document on safety and working method is provided as guidance and for information only. It is the full responsibility of the voestalpine Sadef customer and his mounting company to do the erection of the structures in a professional and safe way, following the composition of the assemblies given in this document and the drawings quoted above and following the national regulations and standards of the country where the project will be built.

voestalpine Sadef is not responsible for any damage that might be caused by missing or not properly mounted parts. Please read the guidelines before starting to assemble the parts. You can always contact us if there are some questions left regarding this document and the assembly of the structure. If the voestalpine Sadef customer adapts the voestalpine Sadef delivered frame without prior written permission by voestalpine Sadef, then the voestalpine Sadef customer automatically takes all responsibility for the stability, functionality and performance of the voestalpine Sadef frame.

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ONE STEP AHEAD.

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## **General Conditions**

### » Please pay attention to following general guidelines:

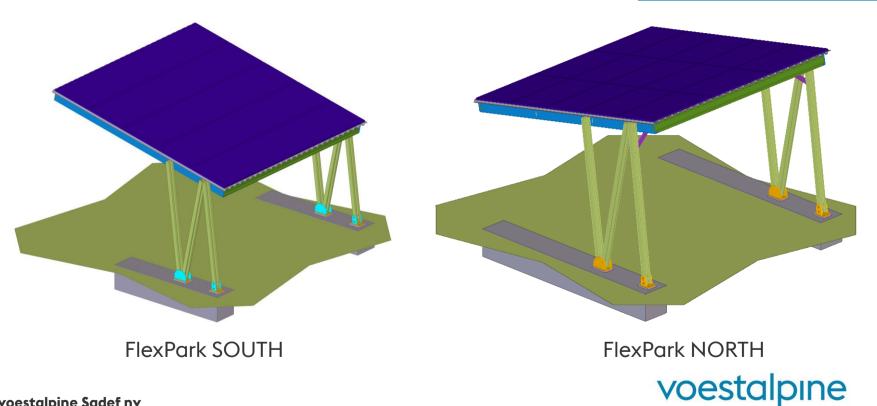
- » The FlexPark<sup>®</sup> product needs to be installed in accordance with the structural drawing(s) and assembly guidelines provided by voestalpine Sadef.
- » Read all the instructions in the assembly guideline carefully before assembling the structure.
- » These assembly instructions are subject to changes without prior notice, therefore please contact voestalpine Sadef to ensure the instructions are up-to-date. voestalpine Sadef reserves the right to refuse liability if these general conditions and the assembly instructions are not respected.
- » It is the entire responsibility of the voestalpine Sadef distributor/customer to verify the compatibility and loading capacity of the used PV-module and its fixing to the corresponding voestalpine Sadef steel frame.
- » The correct tools need to be used for assembling the structure without damaging the components. Do not use non-specified materials. Systems may only be installed by properly trained and technically suitable people.
- » For all the mutual holes in the connections between voestalpine Sadef profiles, the appropriate bolts and nuts need to be applied. Bolts and nuts should be sufficiently tightened with the specified torque.
- » The system can be dismantled in accordance to the reverse steps of this assembly instruction document.



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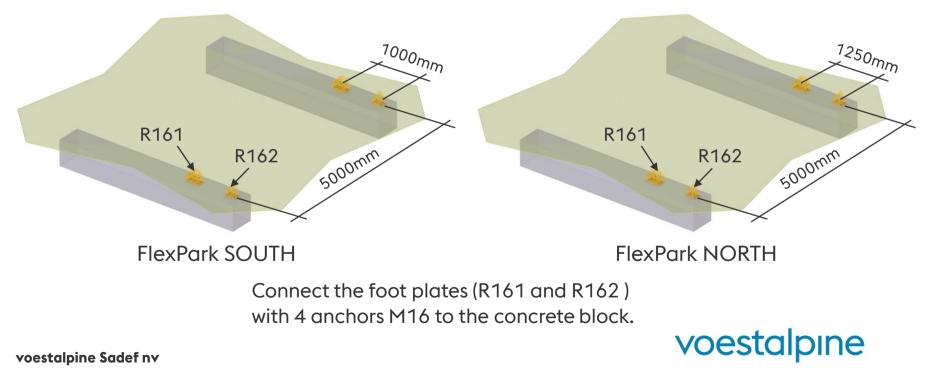


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### Supporting the voestalpine Sadef systems



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DET A

Ø18

Bolt the columns using M16 bolts.

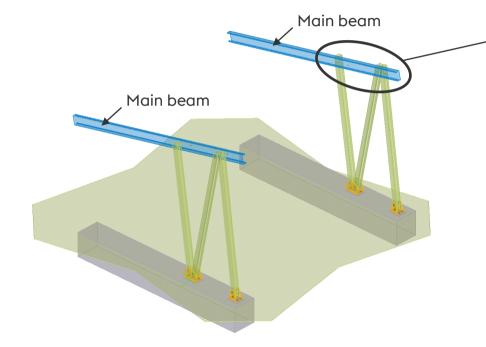
DETAIL A

Columns should be positioned with the round hole Ø18 in web at bottome side (see DET A). The bolts M16 should be positioned at the side of the foot plates (R161, R162), the nuts at the side of the columns.

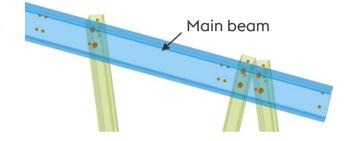
Don't tighten the bolts yet!

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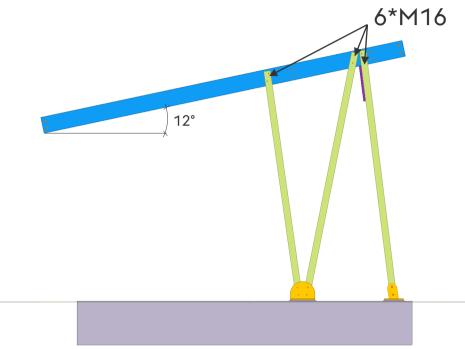


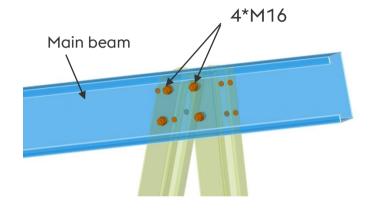
Bolt the main beams to columns using M16 bolts. **Don't tighten the bolts yet!** 

Additional temporary supports of frames may be needed.







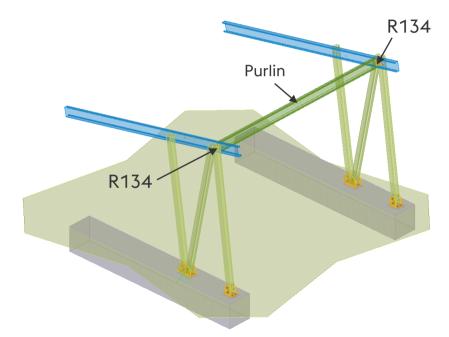


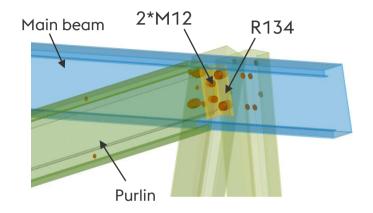
Before tightening bolted connections take care of the right pitch of main beams, which should be equal to 12° referring to horizontal direction.



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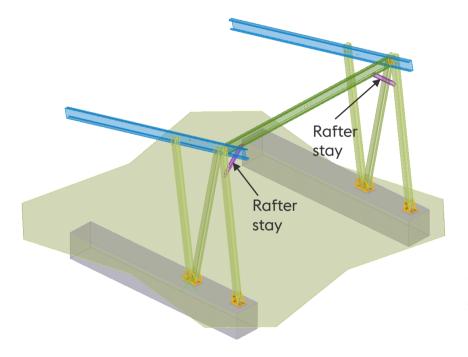


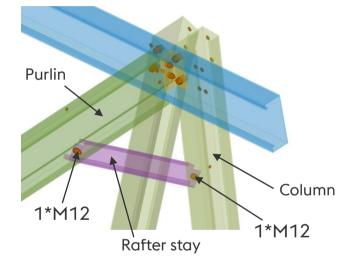


Fix connecting element R134 to the main beam and column with previously used M16 bolts. Connect purlin to the R134 element using M12 bolts. **Don't tighten the bolts yet!** 









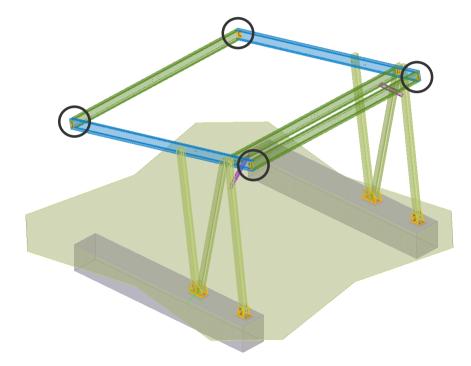
Connect rafter stay to the purlin and to the column using M12 bolts. **Don't tighten the bolts yet!** 

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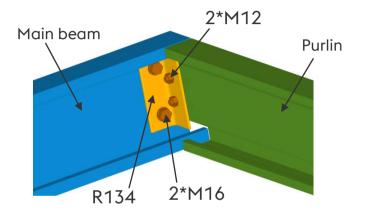
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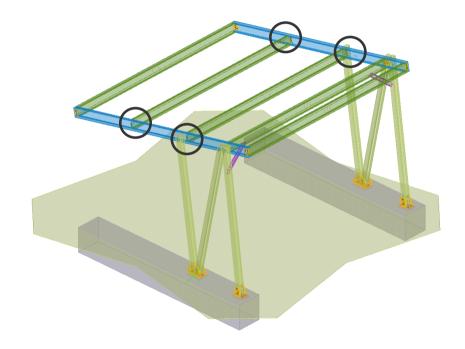
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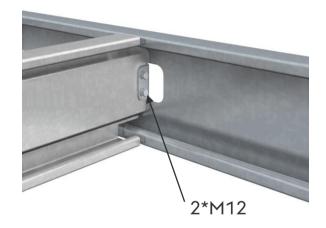


Connect main beams and purlins with R134 elements using M12 and M16 bolts. **Don't tighten the bolts yet!** 





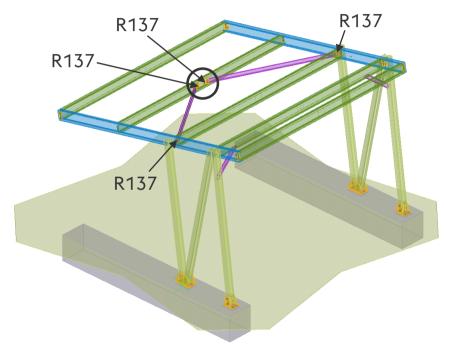




Connect 2 remaing purlins with main beam using M12 bolts. **Don't tighten the bolts yet!** 







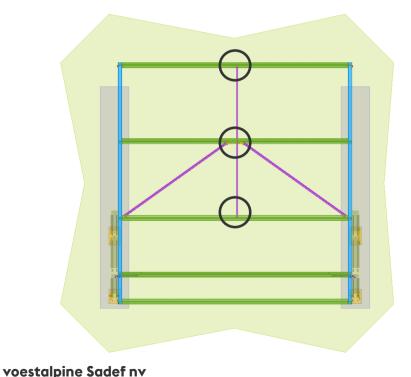
R137 R137 H-bracing H-bracing

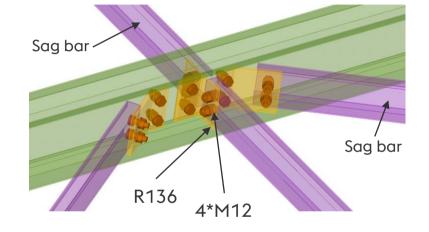
Connect horizontal bracings with purlins using M12 bolts and R137 connecting elements. **Don't tighten the bolts yet!** 

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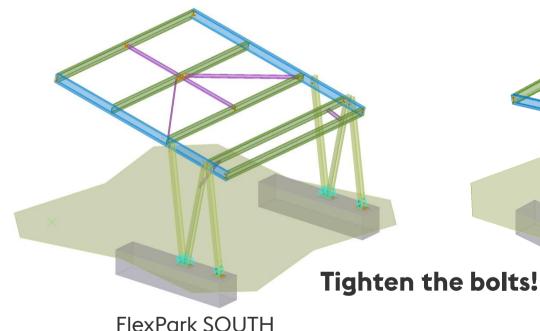




Connect sag bars with purlins using M12 bolts and R136 elements. **Don't tighten the bolts yet!** 

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FlexPark NORTH



ONE STEP AHEAD.

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FlexPark SOUTH

Mount steel sheet roofcovering to voestalpine Sadef FlexPark structure. Maximal distance between screws is 0,33m. Tope of roof covering and screws is full responsibility of voestalpine Sadef customer.

FlexPark NORTH

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FlexPark SOUTH

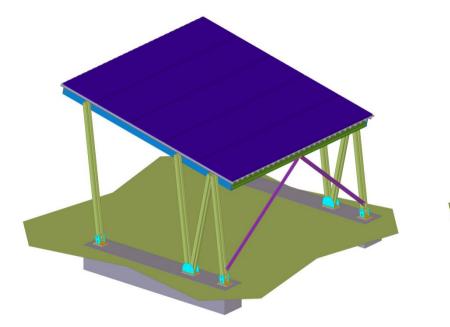
Mount PV-modules to roofcovering according to the manufacturer's instruction (out of scope) and it is full responsibility of voestalpine Sadef customer.

FlexPark NORTH



ONE STEP AHEAD.





#### FlexPark NORTH Heavy



ONE STEP AHEAD.

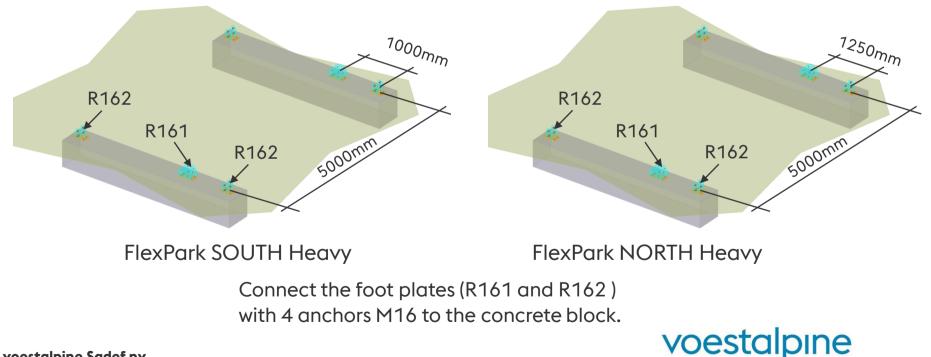
### FlexPark SOUTH Heavy

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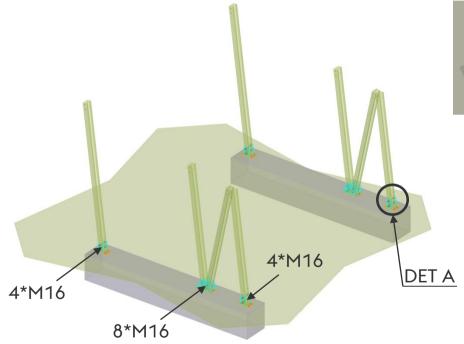
### Supporting the voestalpine Sadef systems



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DETAIL A

Bolt the columns using M16 bolts.

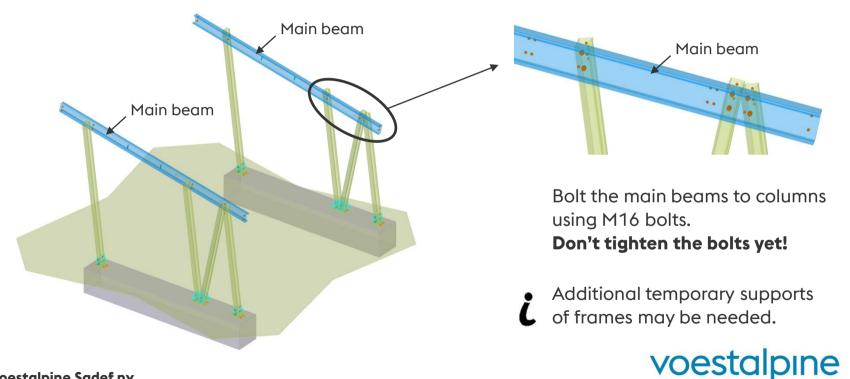
Columns should be positioned with the round hole Ø18 in web at bottome side (see DET A). The bolts M16 should be positioned at the side of the foot plates (R161, R162), the nuts at the side of the columns.

Don't tighten the bolts yet!

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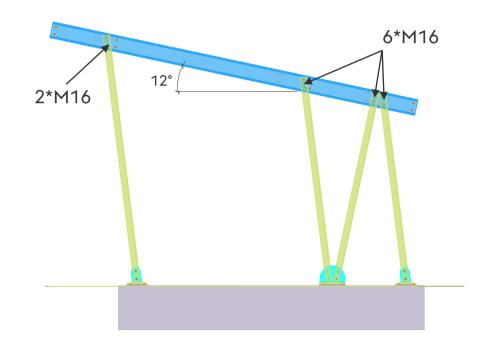
ONE STEP AHEAD.

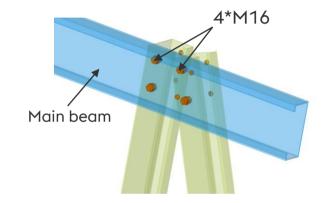




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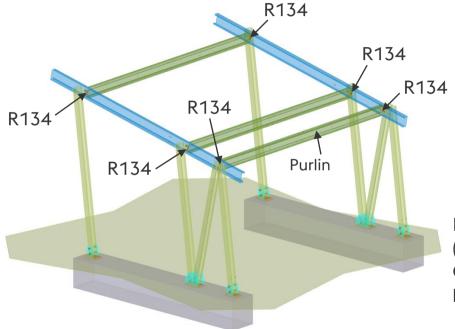


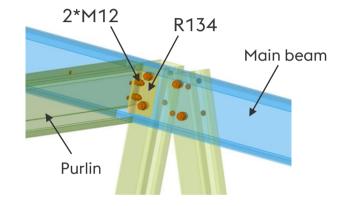


Before tightening bolted connections take care of the right pitch of main beams, which should be equal to 12° referring to horizontal direction.







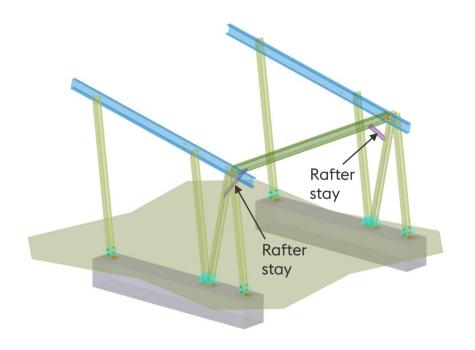


Fix connecting elements R134 to the main beam (and column) with previously used M16 bolts. Connect purlins to the R134 element using M12 bolts. **Don't tighten the bolts yet!** 



ONE STEP AHEAD.





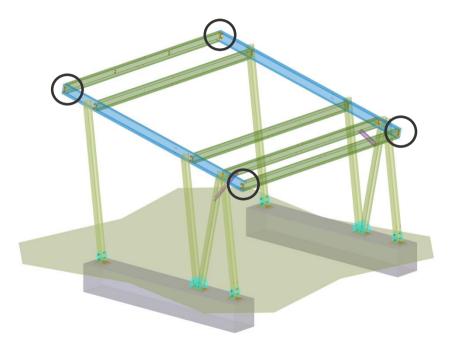
Purlin Purlin 1\*M12 Column 1\*M12 Rafter stay

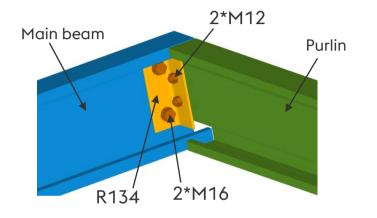
Connect rafter stay to the purlin and to the column using M12 bolts. **Don't tighten the bolts yet!** 

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ONE STEP AHEAD.



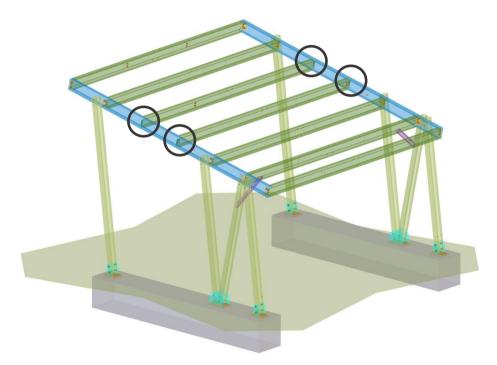


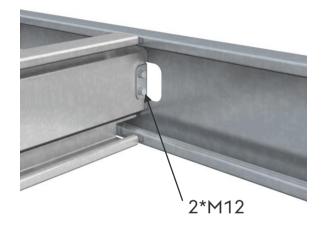


Connect main beams and purlins with R134 elements using M12 and M16 bolts. **Don't tighten the bolts yet!** 





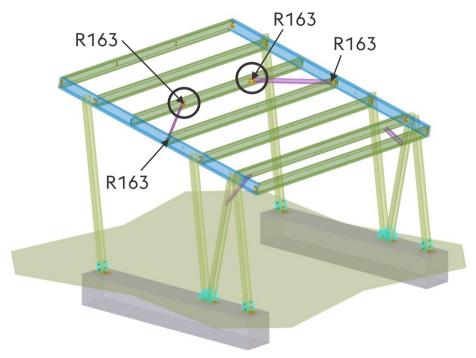


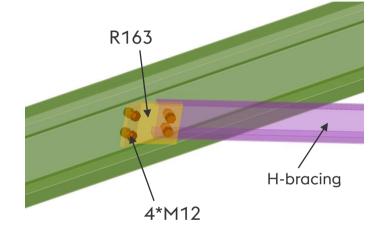


Connect 2 remaing purlins with main beam using M12 bolts. **Don't tighten the bolts yet!** 





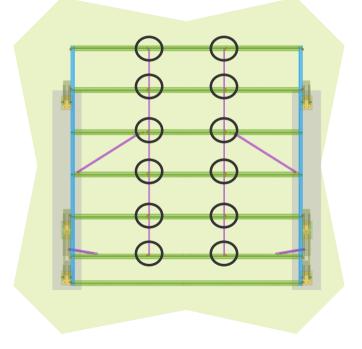


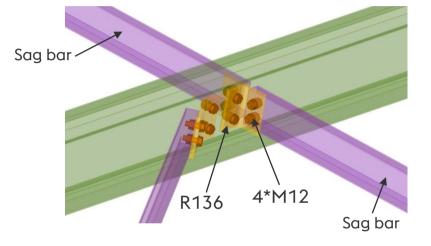


Connect horizontal bracings with purlins using M12 bolts and R163 connecting elements. **Don't tighten the bolts yet!** 

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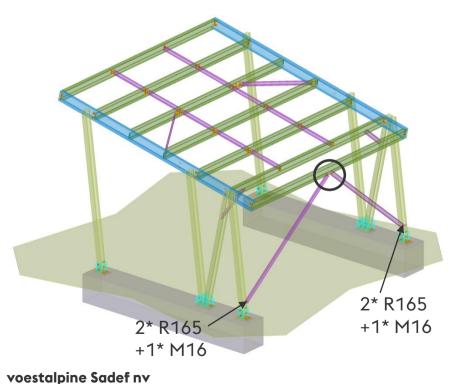


Connect sag bars with purlins using M12 bolts and R136 elements. **Don't tighten the bolts yet!** 

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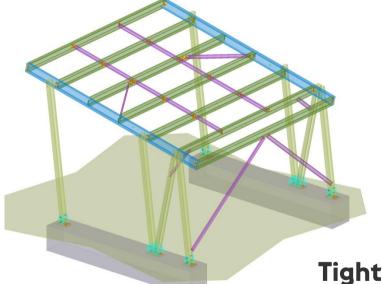


2\* R165 +1\* M16 V-bracing

Connect vertical bracings with purlin and column using twoo R165 taper washers M16 and M16 bolt per connection. **Don't tighten the bolts yet!** 

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### Tighten the bolts!

### FlexPark SOUTH Heavy

FlexPark NORTH Heavy



ONE STEP AHEAD.

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FlexPark SOUTH Heavy

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Mount steel sheet roofcovering to voestalpine Sadef FlexPark structure. Maximal distance between screws is 0,33m. Tope of roof covering and screws is full responsibility of voestalpine Sadef customer.

FlexPark NORTH Heavy





Mount PV-modules to roofcovering according to the manufacturer's instruction (out of scope) and it is full responsibility of voestalpine Sadef customer.

#### FlexPark SOUTH Heavy

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FlexPark NORTH Heavy **voestalpine** 

# PLEASE REMEMBER

The structural drawings are giving more specific project information, and are anyway prior to this document!



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