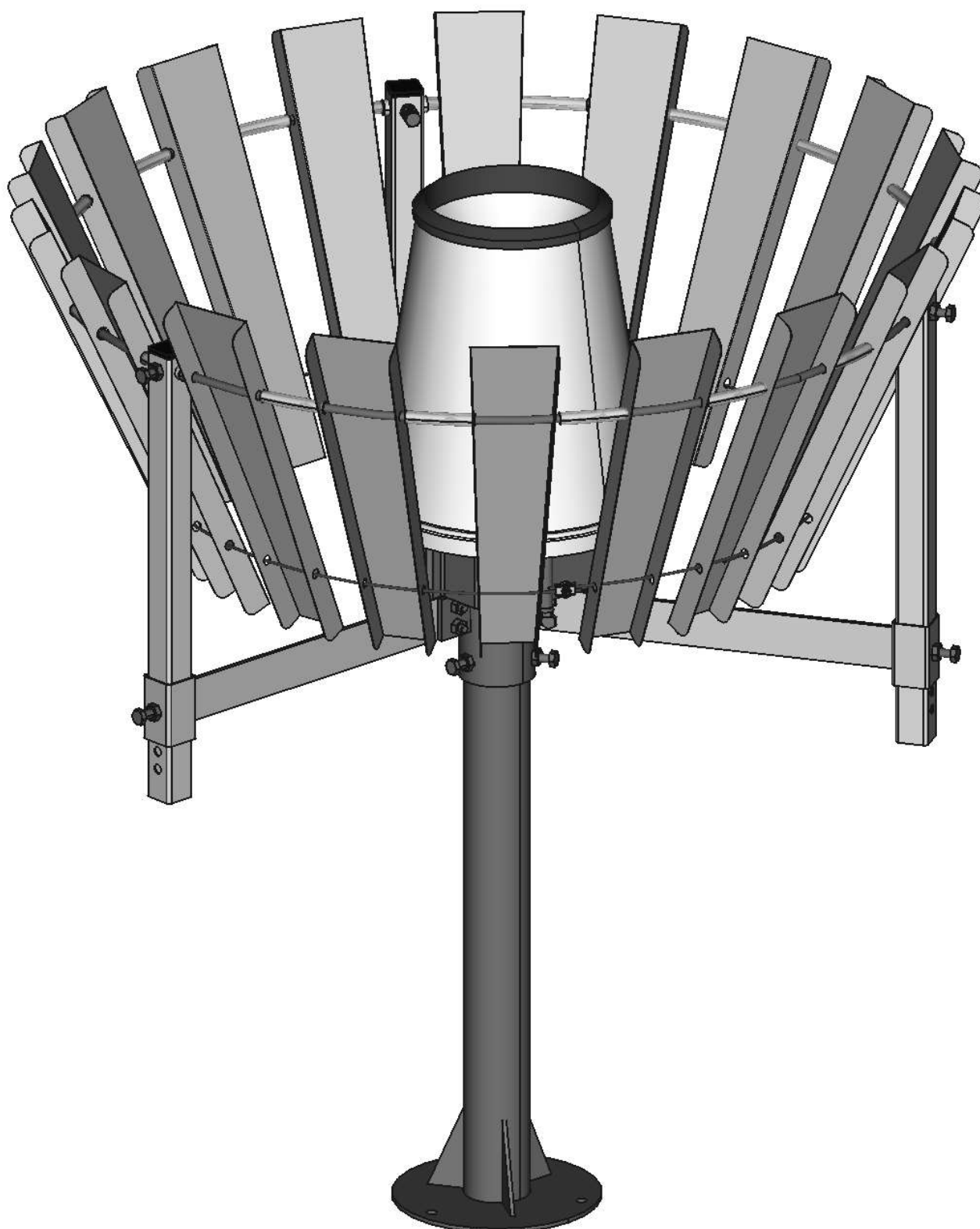


# Assembly Instructions for TWS – Tretyakov Wind Shield

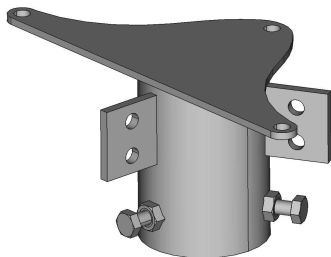
TRWS\_E



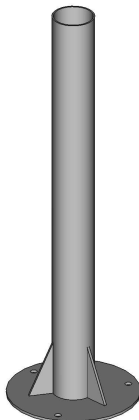
Follow these step-by-step instructions to assemble the TWS for your precipitation measurement system.

**Parts list:**

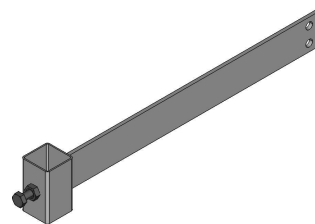
**1. Mounting bracket 1 pc**



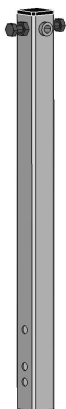
**2. TRWS\_E stand 1 pc**  
(not part of the TWS delivery)



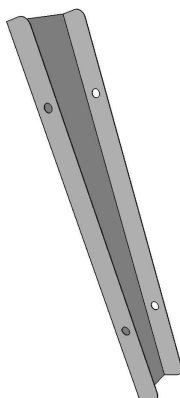
**3. Horizontal arm 3 pcs**



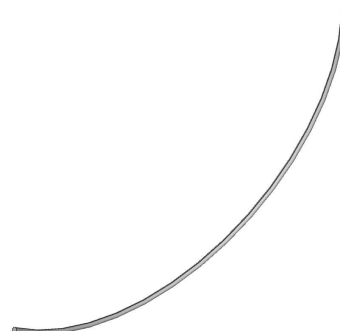
**4. Vertical support 3 pcs**



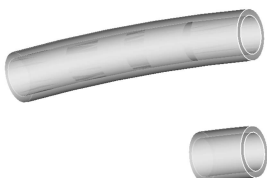
**5. Leaf 18 pcs**



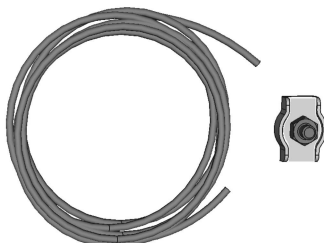
**6. Ring segment 3 pcs**



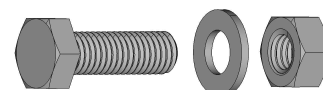
**7. Spacers**  
– long 15 pcs  
– short 6 pcs



**8. Steel cable & clamp 1 pc**



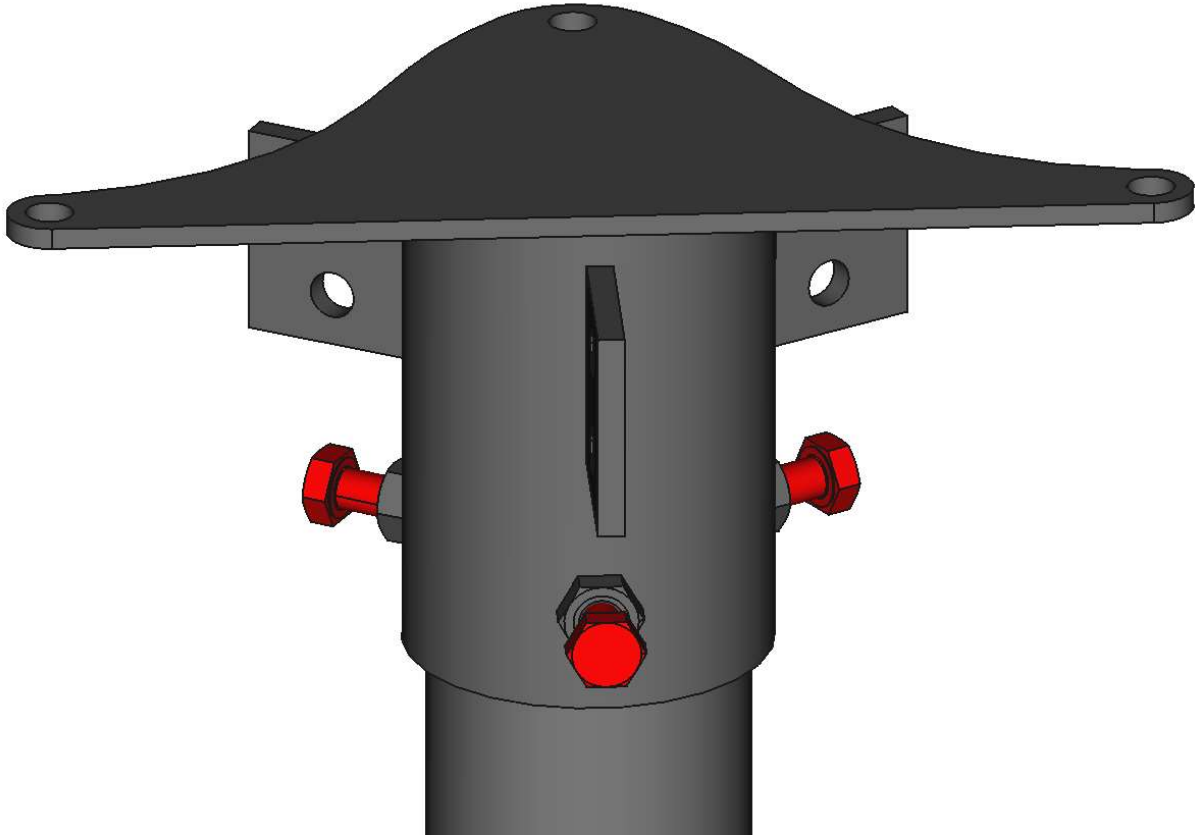
**9. M8x20 bolt with nut & washer 6 pcs**



## Assembly procedure:

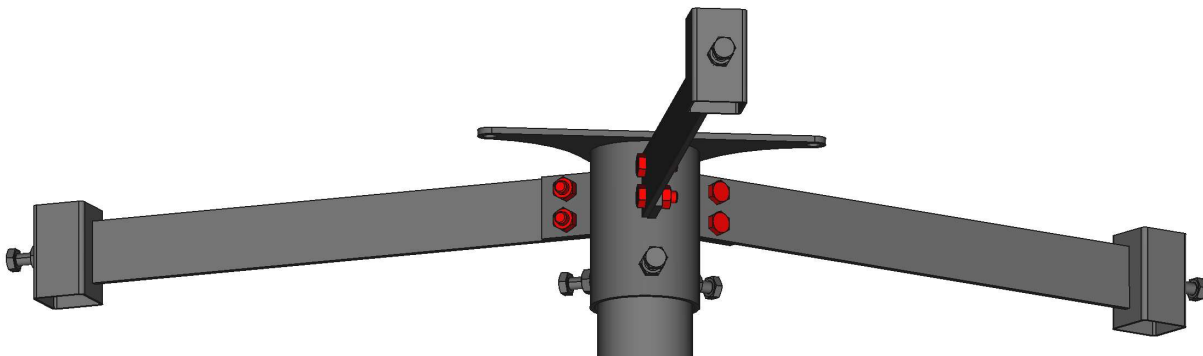
### 1. Fix the Mounting Bracket to the Stand

- Place the **Mounting Bracket (1)** to the **TRWS Stand (2)**.
- Secure the Mounting Bracket using **three M8 bolts**. Tighten with a 13 mm wrench.



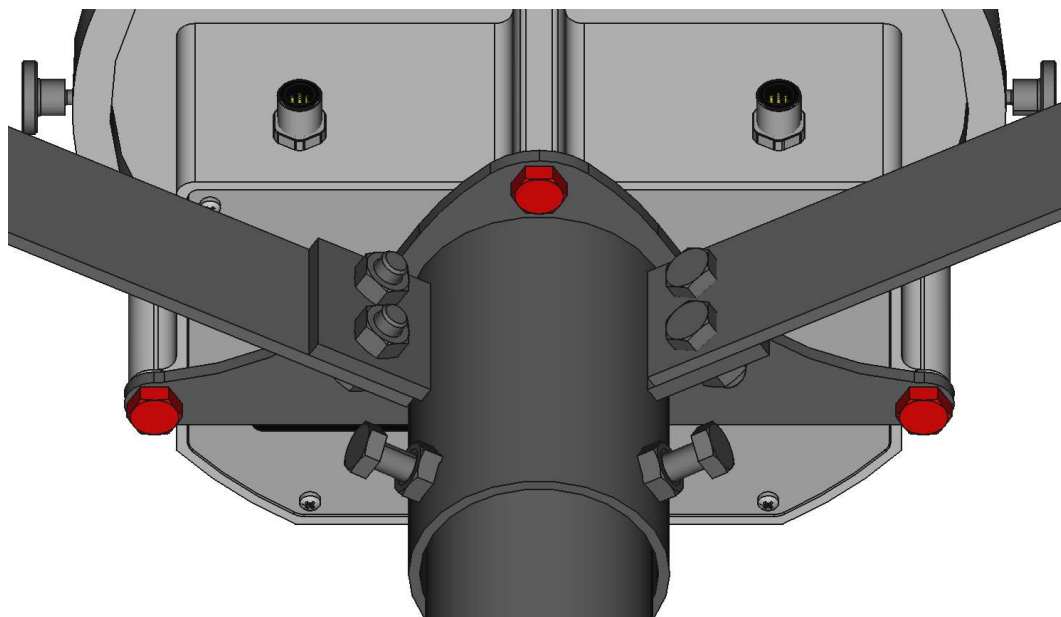
### 2. Attach Horizontal Arms

- Attach **3 pcs Horizontal Arms (3)** to the **Mounting Bracket (1)** using **6 pcs M8x20 bolts with washer & nut (9)** for each arm. Tighten with a 13 mm wrench.



### 3. Attach TRWS\_E base

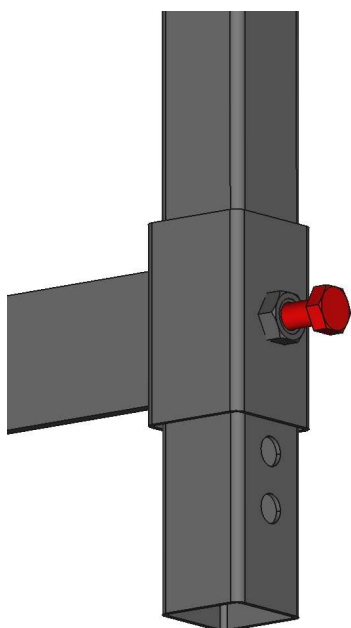
- Position the TRWS\_E base on top, ensuring its threaded holes align with the holes in the flange and the Mounting Bracket.
- Secure the base plate using **three M8 bolts with washer** . Tighten with a 13 mm wrench.



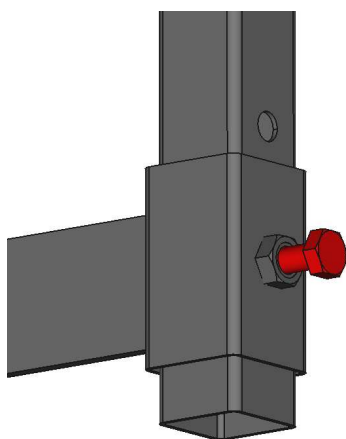
### 3. Attach Vertical Supports

- Attach **3 Vertical Supports** (4) to the ends of the Horizontal Arms (3).
- Use the holes that correspond to your specific TRWS model:

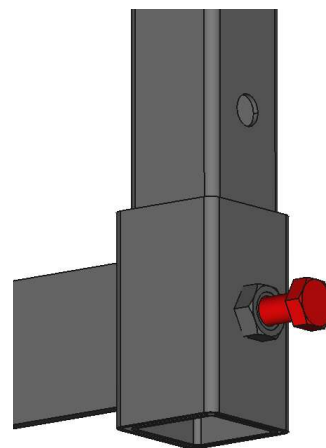
TRWS\_E.200



TRWS\_E.314



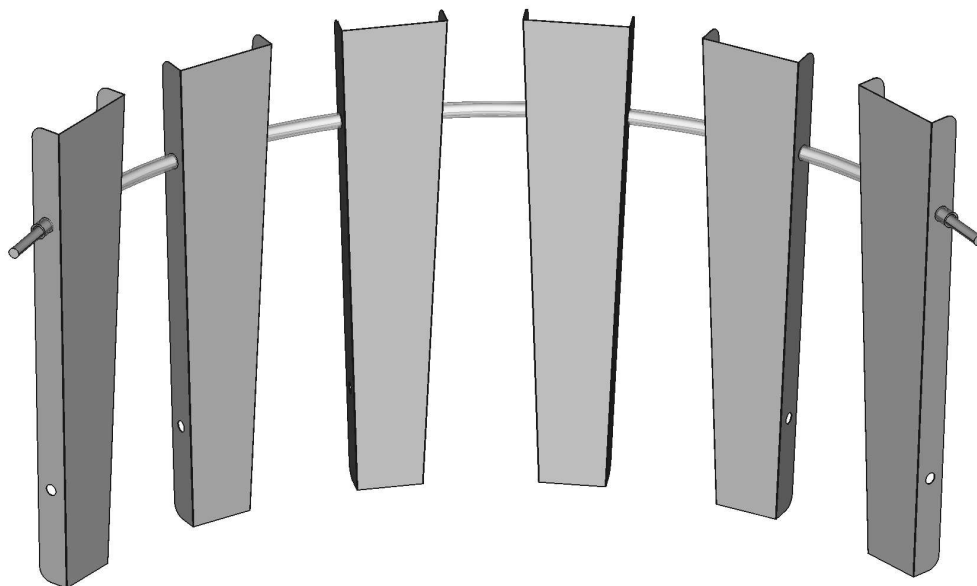
TRWS\_E.400



- Tighten with a 13 mm wrench.

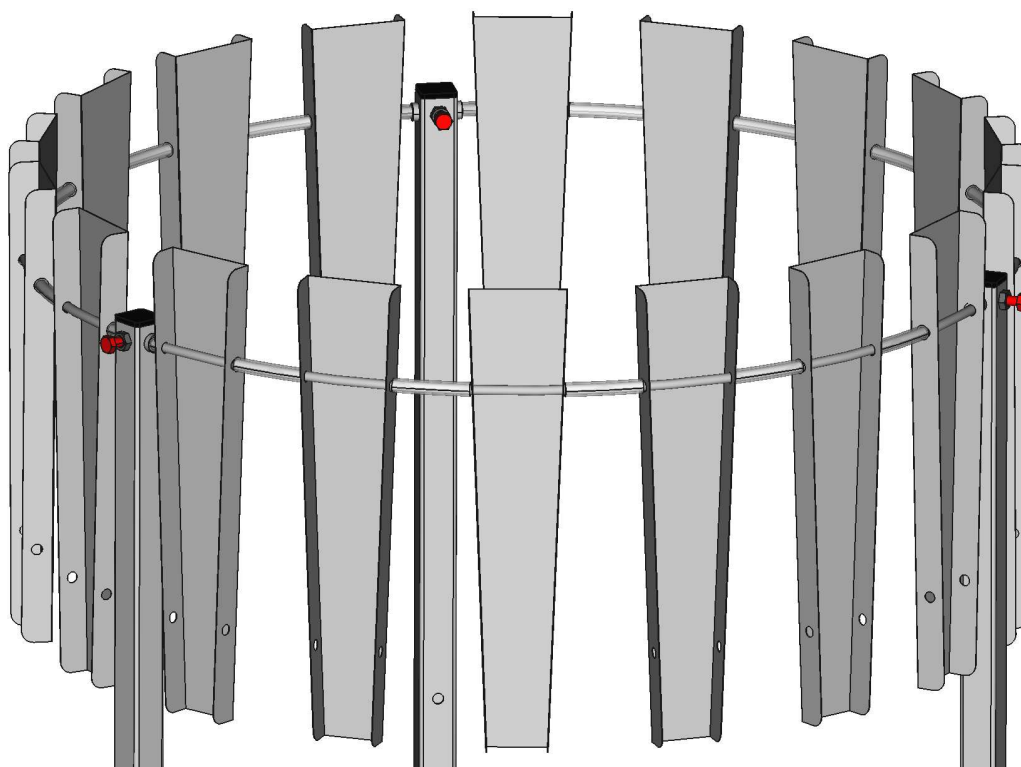
#### 4. Assemble the Ring Segments with Leaves and Spacers

- On each **Ring Segment** (6), alternately attach **Leaves** (5) and **Spacers** (7). Use the holes at the wider ends of the Leaves for attachment. Between **six leaves**, use **5 pcs of long spacers**, and on both ends, use **2 short spacers** each.
- Ensure the flat sides of the Leaves face inward, towards the rain gauge.



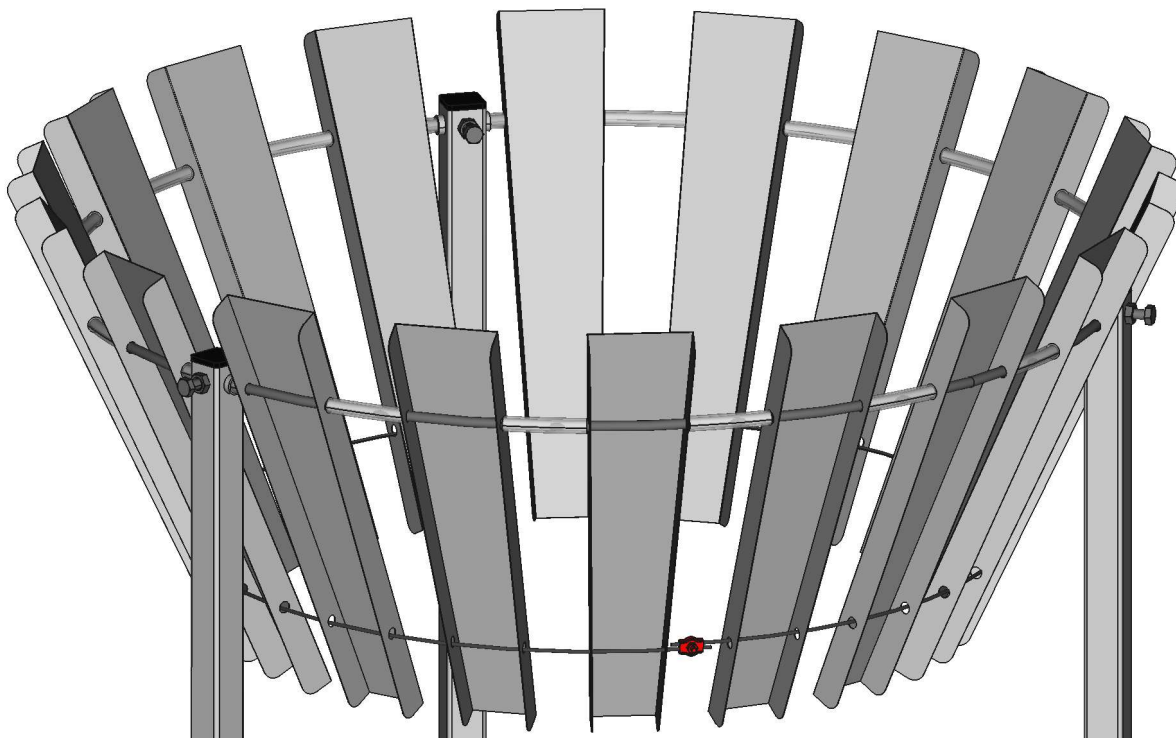
#### 5. Attach the Ring Segments to Vertical Supports

- Insert the ends of each assembled **Ring Segment** (6) into the holes at the top of the Vertical Supports (4).
- Fix the Ring Segments in place using **M8 bolts** on the vertical arms. Tighten with a 13 mm wrench.

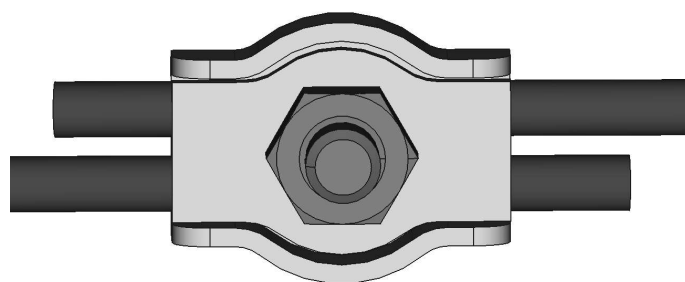


## 6. Install the Steel Cable

- Thread the **Steel Cable** (8) through the holes at the lower ends of each Leaf (5).



- Connect both ends of the cable using the provided clamp. Tighten with a 7 mm socket wrench.



### **Final Adjustments:**

- Verify that all bolts are tightened and the structure is stable.
- Ensure the Leaves are evenly spaced and properly aligned for optimal wind shielding.
- Make sure the stand is securely fastened and anchored to the ground to prevent the entire assembly from vibrating in the wind.