



# SRA WEDGE ANCHOR SPECIFICATIONS



**Technical Data Sheet**  
**SRA-M12 316**  
**Stainless Steel Wedge Anchor**



## Benefits

Suitable for cracked and non-cracked concrete

## General Information

- Overall Length: 125 mm
- Diameter: 12 mm
- Steel Grade: 316 Stainless Steel
- Maximum Plate Thickness: 10 mm
- Minimum Embedment: 95 mm
- Installation Torque: 50 Nm
- Minimum Edge Distance: 150 mm
- Minimum Fixture Spacing : 200 mm

## Reuse Policy

Reusing these fixtures is strictly not approved. Each fixture is designed for single-use only to maintain structural integrity and safety.

## Environmental Conditions

The fixtures are made of 316 stainless steel, which provides excellent corrosion resistance, making them suitable for use in salt-laden environments. However, regular inspection and maintenance are recommended to ensure long-term performance in highly corrosive conditions.

## Load Information

The tables below provide detailed information about the performance of these fixtures under static load conditions. These values are not applicable to dynamic or cyclic loading scenarios.

**Note:** These numbers are valid only for correct setting, a minimum base material thickness of 150 mm, and a minimum 30 MPa concrete capacity.

*Table 1: Characteristic Resistance*

Test Type	Concrete Strength (MPa)	Peak Load Range (kN)	Mean Capacity (kN)
Basic Tension	27.5 - 30.0	18.78 - 34.75	26.17
Tension with Edge Effects	30.0	25.79 - 41.45	31.89
Shear	27.5 - 28.5	45.84 - 57.32	50.70

*Table 2: Allowable Capacity in Non-Cracked Concrete*

Test Type	Concrete Strength (MPa)	Allowable Capacity (kN)
Basic Tension	27.5 - 30.0	8.72
Tension with Edge Effects	30.0	10.63
Shear	27.5 - 28.5	16.90

*Table 3: Allowable Capacity in Cracked Concrete*

Test Type	Concrete Strength (MPa)	Allowable Capacity in Cracked Concrete (kN)
Basic Tension	27.5 - 30.0	6.104
Tension with Edge Effects	30.0	7.441
Shear	27.5 - 28.5	11.830

*Table 4: Test Type, Concrete Strength, and Recommended Loads<sup>(a)</sup>*

Test Type	Concrete Strength (MPa)	Recommended Loads (kN)
Basic Tension	27.5 - 30.0	4.360
Tension with Edge Effects	30.0	5.315
Shear	27.5 - 28.5	8.450

a) With overall partial safety factor for action to be 1.4, the partial safety factors for action depend on the type of loading and shall be taken from national regulations

*Table 5: Allowable capacity for 2 anchors considering 200mm anchor spacing in Non-Cracked Concrete*

Test Type	Concrete Strength (MPa)	Allowable Capacity (kN)
Basic Tension	27.5 - 30.0	13.952
Tension with Edge Effects	30.0	17.008
Shear	27.5 - 28.5	27.04



*Table 6: Allowable capacity for 2 anchors considering 200mm anchor spacing in Cracked Concrete*

Test Type	Concrete Strength (MPa)	Allowable Capacity in Cracked Concrete (kN)
Basic Tension	27.5 - 30.0	9.766
Tension with Edge Effects	30.0	11.9
Shear	27.5 - 28.5	18.928

*Table 7: Recommended loads for 2 anchors considering 200mm anchor spacing in Non-Cracked Concrete*

Test Type	Concrete Strength (MPa)	Recommended Loads (kN)
Basic Tension	27.5 - 30.0	6.976
Tension with Edge Effects	30.0	8.504
Shear	27.5 - 28.5	13.52

#### Notes

- The information provided is based on static load testing and is not valid for dynamic or cyclic loading conditions.
- Proper installation as per the provided specifications is essential to achieve the stated performance metrics. Failure to follow the guidelines may result in reduced capacity and potential structural failure.