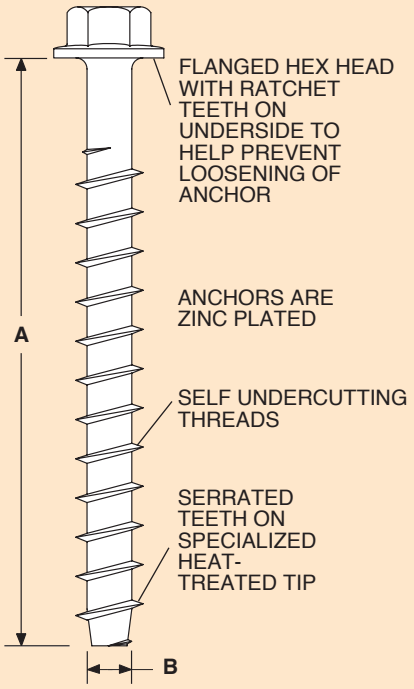
SAST
SEISMIC ANCHOR SELF-TAPPING



TYPE SAST ANCHOR BOLT RATINGS BASED ON ALLOWABLE STRESS DESIGN (ASD)

Type and Size	Embedment Depth (in) (mm)	Installed into 2500psi (17.2Mpa) Normal Weight Concrete Tension† (lbs) (kg)	Shear (lbs) (kg)	Installed into 2500psi (17.2Mpa) Lightweight Concrete Tension† (lbs) (kg)	Shear (lbs) (kg)	Maximum Tightening Torque (Ft-lbs) (N-m)
SAST-3/8	3 1/4 83	920 410	1160 525	555 250	695 315	50 68
SAST-1/2	4 102	1500 680	2010 910	900 405	1205 545	65 88
SAST-5/8	4 1/2 114	1810 820	3870 1755	1085 490	2325 1055	140 190
SAST-3/4	5 1/2 140	2070 940	3925 1780	1245 565	2355 1065	150 205

For combined allowable stress design tension and shear forces on anchors, use the following equation:

$$\frac{T_{Applied}}{T_{Allowable\ (ASD)}} + \frac{V_{Applied}}{V_{Allowable\ (ASD)}} \leq 1.2$$

* These values are applicable when the anchors are installed with periodic special inspection as set forth in Section 1701.5.2 and Section 1704.13 of the IBC.

† The Tension values may be increased for greater compressive strength, up to 8500 psi (58.6 MPa), by multiplying the value by $(F'_c/2500)^{0.5}$, where F'_c is the specified strength of concrete in psi.
For example: SAST-1/2 in 4000 psi normal weight concrete

$$T = \left(\frac{4000}{2500}\right)^{0.5} \times 1500 \text{ lbs} = 1895 \text{ lbs}$$

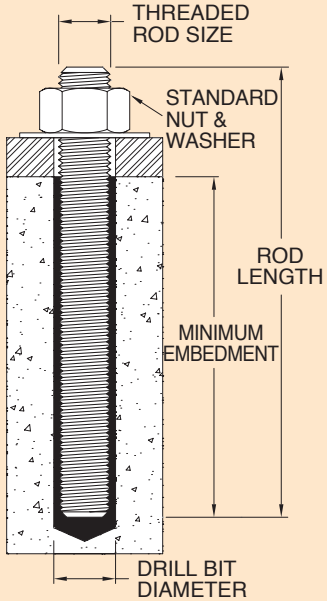
TYPE SAST ANCHOR BOLT DIMENSIONS

Type and Size	A (in) (mm)	B (in) (mm)
SAST-3/8	4 102	3/8 10
SAST-1/2	5 127	1/2 13
SAST-5/8	6 152	5/8 16
SAST-3/4	7 178	3/4 19

Anchors have the following Code Reports:
- ICC-ES-ESR-2713 and City of Los Angeles Report RR25741 for cracked & uncracked concrete
- ICC-ES-ESR-1056 and City of Los Angeles Report RR25560 for CMU (Concrete Masonry Units)
- Florida Statewide Approval FL11506.7
- Factory Mutual 3017082

NOTES:
1. All values are for single anchors with no edge distance or spacing reduction.
2. Anchorage must be designed in accordance with ACI 318-11 Appendix D.
3. Allowable loads are for the attachment of non-structural components.
4. Allowable loads are based on 100% seismic loading in seismic design categories C-F.

SRA
SEISMIC ROD ANCHOR



TYPE SRA ANCHOR DATA

Type and Size	Threaded Rod Size	Rod Length (in) (mm)	Embedment Depth (in) (mm)	Drill Bit Dia (in)	Minimum Concrete Thickness (in) (mm)	Maximum Tightening Torque After curing (Ft-lbs) (N-m)	Number of Anchors that can be installed per 22oz of adhesive
SRA-3/8	3/8-16 UNC	6 152	4 102	1/2	5 7/8 149	10 14	40
SRA-1/2	1/2-13 UNC	7 178	5 127	5/8	7 1/2 190	20 27	30
SRA-5/8	5/8-11 UNC	8 203	6 152	3/4	9 1/4 235	30 41	20
SRA-3/4	3/4-10 UNC	9 229	7 178	7/8	10 3/4 273	45 61	14
SRA-1	1-8 UNC	11 280	9 229	1 1/8	14 355	80 108	7

CURE SCHEDULE†

Concrete Temperature °F	°C	Cure Time (Hrs.)
50	10	72
70	21	24
90	32	24
110	43	24

†For water saturated concrete, these times should be doubled.

For combined allowable stress design tension and shear forces on anchors, use the following equation:

$$\frac{T_{Applied}}{T_{Allowable\ (ASD)}} + \frac{V_{Applied}}{V_{Allowable\ (ASD)}} \leq 1.2$$

NOTES:
1. All values are for single anchors with no edge distance or spacing reduction.
2. Anchorage must be designed in accordance with ACI 318-11 Appendix D.
3. Allowable loads are for the attachment of non-structural components.
4. Allowable loads are based on 100% seismic loading in seismic design categories C-F.

Anchors have the following Code Reports:
- ICC-ES-ESR-2508 and City of Los Angeles Report RR25744 for cracked & uncracked concrete
- NSF/ANSI Standard 61 (216in2 / 1000 gal)

TYPE SRA ANCHOR RATINGS BASED ON ALLOWABLE STRESS DESIGN (ASD)
installed into 2500 psi (17.2 Mpa) Normal Weight Concrete*

Type and Size	A307 Grade C Threaded Rod Tension (in) (mm)	Shear (lbs) (kg)	A193 Grade B7 Threaded Rod Tension (lbs) (kg)	Shear (lbs) (kg)	A193 Grade B6 Stainless Steel (Type 410) Threaded Rod Tension (lbs) (kg)	Shear (lbs) (kg)	A193 Grade B8 Stainless Steel (Type 18-8, 304) Threaded Rod Tension (lbs) (kg)	Shear (lbs) (kg)
SRA-3/8	1585 720	895 405	1585 720	1930 880	1585 720	1350 615	1585 720	700 320
SRA-1/2	2360 1070	1595 720	2360 1070	3440 1560	2360 1070	3410 1545	2360 1070	2325 1055
SRA-5/8	2440 1105	2540 1150	2440 1105	5475 2480	2440 1105	5425 2460	2440 1105	3700 1680
SRA-3/4	4780 2165	3755 1700	4780 2165	8095 3670	3820 1730	8015 3635	3820 1730	5465 2480
SRA-1	7270 3295	6815 3090	7270 3295	14685 6660	7270 3295	14560 6610	7270 3295	9925 4500