

- NOTES**
 - Values in red font color are input values. 1 3/4" dia. round nut shown has equivalent area of square nut used in calculation
 - Values in blue boxes are CALCULATED CAPACITIES. They must be greater than DEMAND

<u>FOOTING WIDTH</u>	<u>EXTENSION</u>	<u>SIDE COVERAGE</u>	<u>EMBEDMENT</u>	<u>CONC COMP STRENGTH</u> (f'_c)	<u>ROUND NUT DIA</u>	<u>SQUARE NUT DIM</u>
38	19	19	13	2500	1 3/4	1.50

DEMAND - REQUIRED CAPACITY

n	ASD	FACTOR	LFRD
2	11900	1.6	38080 lbs

CAPACITIES

STEEL STRENGTH - D.5.1.2

n	Φ - D.3.3.3	Φ - D.4.4	A_{se}	f_{uta}	ΦN_s
2	1	0.75	0.33	120000	60203 lbs OK

BREAKOUT STRENGTH - D.5.2

Φ - D.3.3.3	Φ - D.4.4	A_N	A_{No}	C_{min}	Ψ_2	Ψ_3	h_{ef}	f'_c	N_b	D.5.2.1	ΦN_{cb}
1	0.7	1423	1423	18.862385	1.00	1.0	12.575	2500	54400	54400	38080 lbs OK

PULLOUT STRENGTH - D.5.3

n	Φ - D.3.3.3	Φ - D.4.4	A_b	f'_c	D.5.3.4	Ψ_4	ΦN_{pn} - D.5.3.1
2	1	0.7	1.81	2500	36164	1.0	50630 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 - NA

NOTES

- Values in red font color are input values. 1 3/4" dia. round nut shown has equivalent area of square nut used in calculation
- Values in blue boxes are CALCULATED CAPACITIES. They must be greater than DEMAND

<u>FOOTING WIDTH</u>	<u>EXTENSION</u>	<u>SIDE COVERAGE</u>	<u>EMBEDMENT</u>	<u>CONC COMP STRENGTH</u> (f'_c)	<u>ROUND NUT DIA</u>	<u>SQUARE NUT DIM</u>
38	30	4	20	2500	1 3/4	1.50

DEMAND - REQUIRED CAPACITY

n	ASD	FACTOR	LFRD
2	11900	1.6	38080 lbs

CAPACITIES

STEEL STRENGTH - D.5.1.2

n	Φ - D.3.3.3	Φ - D.4.4	A_{se}	f_{uta}	ΦN_s
2	1	0.75	0.33	120000	60203 lbs OK

BREAKOUT STRENGTH - D.5.2

Φ - D.3.3.3	Φ - D.4.4	A_N	A_{No}	C_{min}	Ψ_2	Ψ_3	h_{ef}	f'_c	N_b	D.5.2.1	ΦN_{cb}
1	0.7	2250	3600	4	0.74	1.0	20	2500	117889	54524	38167 lbs OK

PULLOUT STRENGTH - D.5.3

n	Φ - D.3.3.3	Φ - D.4.4	A_b	f'_c	D.5.3.4	Ψ_4	ΦN_{pn} - D.5.3.1
2	1	0.7	1.81	2500	36164	1.0	50630 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 (for combined anchor at side coverage min + 3 1/2")

Φ - D.3.3.3	Φ - D.4.4	D.5.4.1	f'_c	D.5.4.2	ΦN_{sbg}
1	0.7	80682	2500	NA	56477 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 (for single anchor at side coverage min)

Φ - D.3.3.3	Φ - D.4.4	D.5.4.1	f'_c	D.5.4.2	ΦN_{sbg}
1	0.7	43030	2500	NA	30121 lbs OK

NOTES

- Values in red font color are input values. 1 3/4" dia. round nut shown has equivalent area of square nut used in calculation
- Values in blue boxes are CALCULATED CAPACITIES. They must be greater than DEMAND

<u>FOOTING WIDTH</u>	<u>EXTENSION</u>	<u>SIDE COVERAGE</u>	<u>EMBEDMENT</u>	<u>CONC COMP STRENGTH</u> (f'_c)	<u>ROUND NUT DIA</u>	<u>SQUARE NUT DIM</u>
38	19	19	13	2500	1 3/4	1.50

DEMAND - REQUIRED CAPACITY

n	ASD	FACTOR	LFRD
2	9520	1.4	26656 lbs

CAPACITIES

STEEL STRENGTH - D.5.1.2

n	Φ - D.3.3.3	Φ - D.4.4	A_{se}	f_{uta}	ΦN_s
2	0.75	0.75	0.33	120000	45152 lbs OK

BREAKOUT STRENGTH - D.5.2

Φ - D.3.3.3	Φ - D.4.4	A_N	A_{No}	C_{min}	Ψ_2	Ψ_3	h_{ef}	f'_c	N_b	D.5.2.1	ΦN_{cb}
0.75	0.7	1423	1423	18.862385	1.00	1.0	12.575	2500	54400	54400	28560 lbs OK

PULLOUT STRENGTH - D.5.3

n	Φ - D.3.3.3	Φ - D.4.4	A_b	f'_c	D.5.3.4	Ψ_4	ΦN_{pn} - D.5.3.1
2	0.75	0.7	1.81	2500	36164	1.0	37972 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 - NA

- NOTES**
 - Values in red font color are input values. 1 3/4" dia. round nut shown has equivalent area of square nut used in calculation
 - Values in blue boxes are CALCULATED CAPACITIES. They must be greater than DEMAND

<u>FOOTING WIDTH</u>	<u>EXTENSION</u>	<u>SIDE COVERAGE</u>	<u>EMBEDMENT</u>	<u>CONC COMP STRENGTH</u> (f'_c)	<u>ROUND NUT DIA</u>	<u>SQUARE NUT DIM</u>
38	30	4	20	2500	1 3/4	1.50

DEMAND - REQUIRED CAPACITY

n	ASD	FACTOR	LFRD
2	9520	1.4	26656 lbs

CAPACITIES

STEEL STRENGTH - D.5.1.2

n	Φ - D.3.3.3	Φ - D.4.4	A_{se}	f_{uta}	ΦN_s
2	0.75	0.75	0.33	120000	45152 lbs OK

BREAKOUT STRENGTH - D.5.2

Φ - D.3.3.3	Φ - D.4.4	A_N	A_{No}	C_{min}	Ψ_2	Ψ_3	h_{ef}	f'_c	N_b	D.5.2.1	ΦN_{cb}
0.75	0.7	2250	3600	4	0.74	1.0	20	2500	117889	54524	28625 lbs OK

PULLOUT STRENGTH - D.5.3

n	Φ - D.3.3.3	Φ - D.4.4	A_b	f'_c	D.5.3.4	Ψ_4	ΦN_{pn} - D.5.3.1
2	0.75	0.7	1.81	2500	36164	1.0	37972 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 (for combined anchor at side coverage min + 3 1/2")

Φ - D.3.3.3	Φ - D.4.4	D.5.4.1	f'_c	D.5.4.2	ΦN_{sbg}
0.75	0.7	80682	2500	NA	42358 lbs OK

SIDE-FACE BLOWOUT STRENGTH - D.5.4 (for single anchor at side coverage min)

Φ - D.3.3.3	Φ - D.4.4	D.5.4.1	f'_c	D.5.4.2	ΦN_{sbg}
0.75	0.7	43030	2500	NA	22591 lbs OK