CELEBRATING
25
YEARS OF SAFETY
1996 - 2021

SAFETY FROM THE TOP DOWN

ROOF AND WALL
ANCHORS
MANUAL
# Table of Contents

**Overview**
- Why Choose Summit Anchor Company Anchors? .................................................. 3

**Summit's Anchor Co., Signature eyelet Forged - Quenched and Tempered** ..... 4
- What is Quenching & Tempering? .................................................................... 4

**Design and Layout**
- Design Considerations ................................................................................. 6
- Minimum Loading Requirements for Anchors .............................................. 7
- Anchor Layout Requirements .......................................................................... 7

**Anchor Model Guide** .................................................................................. 14
  - SM-1 Bolt-On Anchors - 4-Holes ............................................................... 14
  - SM-81 Bolt-On Anchors - 2-Holes ............................................................. 15
  - SM-4 Weld On Anchors ............................................................................. 15
  - SM-4 Weld On Anchors - 3 Way Intersection ....................................... 16
  - SM-5 Concrete Embed Anchors ................................................................. 16
  - SM-6 Concrete - Embed Anchors ............................................................... 17
  - SM-85 Concrete - Embed Anchors ............................................................... 17
  - SM-1 Bolt-On to CIP-Cage ......................................................................... 18

**Application Guide** .................................................................................. 19
  - SM-1 Series Anchors - 4 Bolt Pattern ....................................................... 19
  - SM-1 Series Anchors - Custom .................................................................. 22
  - SM-4 Series - Weld-On Anchor ................................................................. 23
  - SM-5 Series - 4 Stud CIP PAttern Anchor ............................................... 24
  - SM-6 Series - Single Pipe CIP Anchor ...................................................... 25
  - SM-81 Series - 2 Bolt Pattern Anchor ....................................................... 26
  - SM-85 Series - 2 Bolt Pattern Anchor ....................................................... 28
  - Various Attachment Details provided by Summit Anchor Co. ................. 29

**CONTACT US FOR MORE INFORMATION:**
- [www.summitanchor.com](http://www.summitanchor.com)
- (800) 372-1098
- info@summitanchor.com

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**NOTICE**
- Important safety measures must be followed to ensure the integrity and performance of the anchor systems. Failure to follow the guidelines may result in injury or damage.

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**Roof and Wall Safety / Tie-Back Anchors**
United States and Canadian national safety standards require a building to provide certified anchorages capable of supporting the required loads before any suspended maintenance work is performed.

Roof and wall anchors are the simplest means of ensuring the safety of maintenance contractors who must work on the building’s face and avoiding liability.

Roof and wall anchors alone may not satisfy all of the safety requirements of your structure, but when properly designed and installed, they can play a vital role in achieving compliance with OSHA requirements and ANSI/IWCA I-14.1 and CAN/CSA Z91 window cleaning safety standards.

Summit Anchor Company can provide anchorage that will facilitate whatever exterior maintenance might be required on your building. Some common examples of this type of maintenance are:

- Construction
- Window cleaning
- Waterproofing, caulking and facade cleaning
- Facade roof renovations, windows replacement
- Any interior or exterior maintenance where suspended work must be performed.

Regardless of what mechanical suspension device may be used by your exterior maintenance contractor, ANSI/IWCA I-14.1, section 5.8.22 states that for each suspended worker “anchorage of the lifeline should be independent of any portable support device.” One anchorage supports the worker’s equipment (i.e. boatswain chair), and another anchorage is used to tie off fall arrest equipment of safety line. OSHA 1910.66 appendix C, section 1 and OSHA 1926.451 (g) contain similar requirements.

Summit Anchor Company can assist you with the design of a suspended maintenance system that complies with OSHA and ANSI/IWCA I-14.1 requirements. By utilizing our expertly engineered anchors, and other equipment, as needed, with a well designed anchor layout roof plan, we provide the highest level of safety for suspended workers.
Why Choose Summit Anchor Company Anchors?

Our anchor eyes are drop forged, resulting in a stronger anchor than the common U-bar type of anchors. According to the Forging Industry Association: “Forgings have to be grain-oriented to shape for greater strength. Machined bar and plate may be susceptible to fatigue and stress corrosion because machining cuts material grain pattern. In most cases, forging yields a grain structure oriented to the part, resulting in optimum strength, ductility, and resistance to impact and fatigue.” The additional quench-and-tempering process of Summit's anchor eyes ensures consistent performance of each non-stainless steel anchor eye. The heat treatment and cooling process capitalizes on the properties of the steel to create anchor eyes with reduced risk of catastrophic failure due to brittleness and with the toughness to withstand the critical application involved with suspended maintenance.

Here are some other reasons...

- **Corrosion resistance** Our anchors are completely hot-dipped galvanized with stainless bolts. Hollow Structural Sections (HSS) may be filled with molded urethane insulation to reduce thermal transfer and condensation and are commonly used in green construction. This option is recommended by Summit Anchor Company but must be specified.

- **OSHA/ANSI compliance** Our anchors have been engineered and tested to comply with current OSHA regulations and IWCA I-14.1 safety standard for fall arrest and suspended maintenance.
Summit’s Anchor Co., **Signature eyelet**
Forged - Quenched and Tempered

What is Quenching & Tempering?

Quenching and tempering is a process that strengthens and hardens steel. The process involves heating and then rapidly cooling the part in water or oil. This process provides the performance needed for critical suspended access and fall protection applications.
Design and Layout

Experience and forethought are required to design a suspended maintenance system that is code-compliant and safe to utilize as well as to install. The ANSI/IWCA I-14.1 Window Cleaning Safety Standard requires that “anchor design and layout shall be performed by a qualified person experienced in such design” (Appendix C). Summit Anchor Co. has 25 years of experience designing code-compliant systems and providing layout drawings for use during installation, testing, and future maintenance work.

Design Considerations

1. Carefully examine all pertinent structural and architectural project drawings to find areas requiring suspended access:
   • Windows located above 20 ft.
   • Building facade requiring periodic maintenance (i.e. re-caulking and waterproofing)
   • Areas above 6 ft. from grade that workers will need to access

2. Identify unique building features that may require additional suspended maintenance products:
   • Overhanging roofs
   • Atriums
   • Sloped roofs
   • Roofs above 300 ft.
   • Cornice conditions
   • Balconies
   • Skylights
   • Rotundas
   • Sloped walls
   • Curtain walls
   • Canopies, signage, and other projections

3. Determine if anchors will be used with rope descent systems, as tie backs for swing stage equipment, or both.

4. Identify unique building features that may require additional suspended maintenance products:
   • Roof slabs
   • Concrete curbs
   • Concrete beams
   • Concrete walls
   • Steel beams

5. Verify that structural features to which anchors and davits, etc. might be attached have the capacity to support the allowable test and ultimate loading requirements below. OSHA and ANSI/IWCA I-14.1 standards require that structural elements are capable of supporting loading requirements (see loading requirements below).

6. Verify the structural capacity of the parapet wall commensurate with the loading application (i.e. parapet clamps, outriggers, suspension lines, fall arrest lines, power cables, etc.) during suspended maintenance. If the parapet wall cannot support these loads, additional suspended maintenance products may be required to circumvent loading the parapet.

7. Verify that workers will be able to safely access anchor locations. The ANSI/IWCA I-14.1 requires fall protection when a maintenance worker must travel within 6 feet of an unprotected edge.

OSHA Subpart D Regulations prohibits rope descent systems for heights greater than 300 feet above grade, unless... See OSHA Subpart D for further information.
Minimum Loading Requirements for Anchors

- 5,000 lb. Ultimate load
- 2,500 lb. Test load
- 1,250 lb. Allowable load

**NOTE:** The structure to which anchorages are attached must also support the reactionary forces imposed by anchorages and davit, etc. (See Specifications for further detail.)

Anchor Layout Requirements

1. Anchors shall be identified on a plan of maintenance, typically posted on the inside of the roof door, so that workers can easily locate these anchorages on roofs.

2. Each worker shall be tied off to two independent anchorages – one for a fall arrest rope and one for a suspension rope.

3. Anchorages shall be placed in line with the work area requiring service, and there shall be no objects obstructing the path of the rope from the anchorage to the work area. Properly aligned anchors prevent unsafe lateral rope movement or displacement, which damages the rope proportionate to load.

4. Anchors should be placed to allow for at least two workers to make rope descending system descents in the same area of the building façade for both suspension line and fall arrest line.

5. Consideration should be given to providing sufficient anchorage for rescue workers to access window cleaners in the event that they are stranded on the façade of the building.

6. Anchors shall not be placed within 6 feet (1800 mm) of an unprotected roof edge unless fall protection is provided. In most cases anchors can and should be placed further than 6 feet (1800 mm) back from the edge to reduce risk of falling.

7. Outside corners of the roof are of particular concern. Anchors must be located to prevent the rope from being displaced on the parapet/guardrail. See diagram below:

8. The diagram below illustrates the standards governing a safe placement of roof anchors:
ROPE DESCENT SYSTEM

LAYOUT REFERENCE DIAGRAM

NOTES:

1. MAXIMUM ANCHOR SPACING = 12FT.
2. MAXIMUM TIE-BACK DISTANCE FROM ROOF EDGE = 56FT.
3. MAXIMUM ANGLE FROM PERPENDICULAR = 15° FOR BOTH SUSPENSION ROPE AND FALL ARREST ROPE.
4. WINDOW CLEANER SHALL NOT REACH FURTHER THAN SIX (6) FEET IN ANY DIRECTION.
5. THE ABOVE IS INTENDED TO SERVE AS AN GUIDE TO THE I.14 WINDOW CLEANING SAFETY STANDARD. A QUALIFIED PERSON IS REQUIRED TO DESIGN THE ANCHOR LAYOUT SYSTEM (SEE SECTION 9 OF ANSI I.14.1-2001) AND REFER TO FEDERAL AND LOCAL OSHA REGULATIONS AS THESE ARE MORE STRINGENT.
6. PERIMETER GUARDING 42- INCHES IN HEIGHT (SEE SECTION 9.2 FALL PROTECTION OF ANSI I.14) OR A PERSONAL FALL ARREST SYSTEM IS REQUIRED WHEN INSTALLING OR RIGGING TO AN ANCHOR WITHIN 6FT. OF A ROOF EDGE (SEE I.14.1 2001 APPENDIX)
7. AT OUTSIDE CORNERS, ANCHORS SHALL BE LOCATED TO PREVENT A ROPE FROM BEING DISPLACED ALONG THE ROOF EDGE.
8. WHILE SUSPENDED, WINDOW CLEANERS SHALL NOT REACH FURTHER THAN 6FT. (SEE ROPE DESCENT SYSTEMS (RDS) SECTION 5.7.10)

LEGEND

- NON RESTRICTED DROP POINTS
ROPE DESCENT SYSTEM - USING A COMPOSITE SLING ANCHORAGE

OFTEN MEETING OSHA MINIMUM REQUIREMENT OF 2 ANCHORS PER WORKER FOR ROPE DESCENT SYSTEMS CAN BE CHALLENGING ON STEEL FRAME BUILDING ROOFS. INSTALLATION OF A COMPOSITE ANCHOR SLING MAY BE THE SOLUTION.

LAYOUT REFERENCE DIAGRAM

THE WINDOW CLEANER IS ALWAYS TO ATTACH TO TWO SEPARATE ANCHORAGES. WHEN THE WINDOW CLEANER ATTACHES TO THE MID SPAN EYE ON THE HORIZONTAL STEEL LINE FOR PRIMARY SUSPENSION LINE OR FALL PROTECTION, BOTH ANCHORS ARE PUT INTO USE FOR THAT ONE PRIMARY SUSPENSION. THEIR SECOND LINE A.K.A. THE LIFE LINE OR SAFETY LINE SHALL BE ATTACHED TO A COMPLETELY SEPARATE ANCHORAGE. THIS SEPARATE ANCHORAGE SHALL NOT BE EITHER OF THE ANCHORAGES THAT SUPPORTS THE HORIZONTAL STEEL LINE WITH MID SPAN RING FOR THEIR PRIMARY SUPPORT.

LEGEND

- **SAFETY ANCHOR**
- **2 ANCHORAGES FOR COMPOSITE SLING ANCHORAGE**
- **OBLONG RING**
- **CABLE SLING**
- **SAFETY LINE**
- **SUSPENSION LINE**

20'-0" DISTANCE BETWEEN STEEL BEAMS

COMPOSITE ANCHORAGE MADE FROM 1 CABLE SPAN ATTACHED TO 2 INDEPENDENT ANCHORAGES

30" MIN. ANGLE

DEPART POINT (MULLION BETWEEN 2 ANCHORS)

ROPE DESCENT SYSTEM

SET BACK GUARDRAIL LAYOUT REFERENCE DIAGRAM

A-3
MARGINAL OPTION
ANCHORAGE FOR USE WITH HATCH FOR FALL PROTECTION
ADDING AN ANCHORAGE FOR FALL PROTECTION ADJACENT TO A ROOF
HATCH OR SKY LIGHT OR OPENING IN THE ROOF DOES NOT ELIMINATE A
FALL HAZARD

BEST OPTION
HATCH GUARD FOR USE WITH HATCH FOR FALL PROTECTION
ADDING AN ROOF HATCH GUARD WITH WALK THROUGH LASIER RUNS FOR FALL
PROTECTION TO A ROOF
HATCH ELIMINATES MANY FALL HAZARDS. INCORPORATION OF A
HATCH GUARD IS CONSIDERED BEST PRACTICE
BY SUMMIT ANCHOR CO.

ANCHOR LAYOUT REFERENCE
TEMPLATE GUIDE FOR 2 WORKERS
PER BAY AT 20'-0" FT COLUMN TO
COLUMN SPACING
TO 14.1 2001 WINDOW CLEANING SAFETY STANDARD

NOTES:
1. MAXIMUM TIE-BACK DISTANCE FROM ROOF EDGE = 50FT.
2. MAXIMUM ANGLE FROM PERPENDICULAR = 15° FOR BOTH SUSPENSION
   ROPE AND FALL ARREST ROPE.
3. WINDOW CLEANER SHALL NOT REACH FURTHER THAN SIX (6) FEET IN
   ANY DIRECTION.

LEGEND
YELLOW ZONE: 2 ANCHOR PAIRS CENTERED ON THE MULLIONS WITH
20'-0" COLUMN SPACING.
GREEN ZONE: ANCHORS AT 6'-8" SPACING WITH 20'-0" COLUMN SPACING.
ANCHOR LAYOUT FOR 1 WORKER PER BAY AT 20'-0" FT COLUMN TO COLUMN SPACING

TO 14.1 2001 WINDOW CLEANING SAFETY STANDARD

NOTES:
1. MAXIMUM TIE-BACK DISTANCE FROM ROOF EDGE = 50FT.
2. MAXIMUM ANGLE FROM PERPENDICULAR = 15° FOR BOTH SUSPENSION ROPE AND FALL ARREST ROPE.
3. WINDOW CLEANER SHALL NOT REACH FURTHER THAN SIX (6) FEET IN ANY DIRECTION.

LEGEND
- YELLOW ZONE: 3 ANCHOR CENTERED ON EVERY OTHER WINDOW MULLION @ 4'-0" FT ON CENTER WITH 20'-0" COLUMN SPACING.
- GREEN ZONE: ANCHORS AT 8'-0" SPACING WITH 20'-0" COLUMN SPACING.

ANCHOR LAYOUT REFERENCE TEMPLATE GUIDE FOR 2 WORKERS PER BAY AT 24'-0" FT COLUMN TO COLUMN SPACING

TO 14.1 2001 WINDOW CLEANING SAFETY STANDARD

NOTES:
1. MAXIMUM TIE-BACK DISTANCE FROM ROOF EDGE = 50FT.
2. MAXIMUM ANGLE FROM PERPENDICULAR = 15° FOR BOTH SUSPENSION ROPE AND FALL ARREST ROPE.
3. WINDOW CLEANER SHALL NOT REACH FURTHER THAN SIX (6) FEET IN ANY DIRECTION.

LEGEND
- YELLOW ZONE: 2 ANCHOR PAIRS CENTERED ON THE MULLIONS WITH 24'-0" COLUMN SPACING.
- GREEN ZONE: ANCHORS AT 8'-0" SPACING WITH 24'-0" COLUMN SPACING.
ANCHOR LAYOUT REFERENCE TEMPLATE GUIDE FOR 2 WORKERS PER BAY AT 30'-0" FT COLUMN TO COLUMN SPACING

TO 14.1 2001 WINDOW CLEANING SAFETY STANDARD

NOTES:
1. MAXIMUM TIE-BACK DISTANCE FROM ROOF EDGE = 50FT.
2. MAXIMUM ANGLE FROM PERPENDICULAR = 15° FOR BOTH SUSPENSION ROPE AND FALL ARREST ROPE.
3. WINDOW CLEANER SHALL NOT REACH FURTHER THAN SIX (6) FEET IN ANY DIRECTION.

LEGEND
- YELLOW ZONE: ANCHOR PAIRS CENTERED ON EVERY OTHER WINDOW MULLION @ 10 FT ON CENTER WITH 30'-0" COLUMN SPACING.
- BLUE ZONE: ANCHORS AT 7'-6" SPACING CENTERED @ WINDOW MULLION WITH 30'-0" COLUMN SPACING.
- GREEN ZONE: ANCHORS AT 10'-0" SPACING WITH 30'-0" COLUMN SPACING.

NOTE: FOR RETROFIT APPLICATIONS DO NOT LOCATE ANCHOR WITHIN 3'-0" OF CENTER OF COLUMN LINE INTERSECTION TO AVOID DRILLING INTO CONCENTRATION OF REINFORCING BAR.
CONCRETE - EMBED ANCHORS

SINGLE PLATE, CAST-IN-PLACE ANCHOR
E1C-PE-04-050-050-1833.5-G
SM-6-5-18-12

2-STUD, CAST IN PLACE ANCHOR
E1C-PE-04-080-040-00R0.0-G
SM-85-[8-4]-X-12-V-06
SM-1 Series Anchors - 4 Bolt Pattern

**ROOF ANCHOR BOLTED THROUGH CONCRETE SLAB**

1. **ANCHOR LOADING**
   - USE WITH PLATES OR ANCHORS UNTIL A MINIMUM BUILD OUT WELD TENSILE STRENGTH OF 70 KSI
   - STEEL WIRE: E70 (MIN. TENSILE STRENGTH OF 70 KSI)
   - ALL FORGED PAD EYES: AISI 1035

2. **COMPATIBLE STRUCTURE**
   - ENGINEERING/ANALYSIS PROVIDED UNDER THIS STAMP AND SEAL BY DHC, IS ONLY FOR EQUIPMENT ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING
   - EXISTING OR PROPOSED BUILDING INTENDED USAGE OF EQUIPMENT IS OUT OF THIS SCOPE

3. **ANCHOR LAYOUT**
   - COMPLIES WITH APPLICABLE LOCAL AND NATIONAL CODES, REGULATIONS, SUPERVISION OF A PROFESSIONAL ENGINEER

4. **Web:** www.summitanchor.com
   - Toll Free: 800.372.1098
   - Tel: 301.874.4941

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**ANCHOR MOUNTED WITH 4 EPOXY FASTENERS**

1. **ANEKOR LOADING**
   - USE WITH PLATES OR ANCHORS UNTIL A MINIMUM BUILD OUT WELD TENSILE STRENGTH OF 70 KSI
   - STEEL WIRE: E70 (MIN. TENSILE STRENGTH OF 70 KSI)
   - ALL FORGED PAD EYES: AISI 1035

2. **MIN. EDGE WELD**
   - USE WITH PLATES OR ANCHORS UNTIL A MINIMUM BUILD OUT WELD TENSILE STRENGTH OF 70 KSI
   - STEEL WIRE: E70 (MIN. TENSILE STRENGTH OF 70 KSI)
   - ALL FORGED PAD EYES: AISI 1035

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**WEB:** www.summitanchor.com
- Toll Free: 800.372.1098
- Tel: 301.874.4941

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**APPLICATION GUIDE**

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**SUMMIT STANDARD**

| MODEL     | SIZE | LENGTH | THICKNESS | HOLE SIZE | HOLE DEPTH | EDGE WELD | EDGE DEPTH | COVER PLATE | FILLERS | BOLT TYPE | PILOT HOLE | FILLER HOLE | INSTALLATION |
|-----------|------|--------|-----------|-----------|------------|----------|------------|-------------|---------|-----------|------------|------------|-------------|--------------|
| SUM-1-8-12-06 | 8"   | 12"    | 4"        | 5/8"      | 8"         | 8"       | 4"         | 6"          | 5/8"    | 3/8"      | 5/8"       | 5/8"       | EPOXY KICKER |
| SUM-1-10-18-06 | 10"  | 18"    | 4"        | 5/8"      | 10"        | 10"      | 4"         | 6"          | 5/8"    | 3/8"      | 5/8"       | 5/8"       | EPOXY KICKER |
| SUM-1-16-45-06 | 16"  | 45"    | 4"        | 5/8"      | 16"        | 16"      | 4"         | 6"          | 5/8"    | 3/8"      | 5/8"       | 5/8"       | EPOXY KICKER |

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**SUMMIT ANCHOR CO.**
- Summit Anchor Co.
- 507 Metropolitan Co., Suite F, Frederick, MD 21704
- Tel: 301.874.4941, Fax: 301.620.9819
"Your one stop provider for all fall protection, suspended maintenance equipment, installation and testing."
### ANCHOR LOADING

- 1.250 LB. WORKING LOAD LIMIT
- 5,000 LB. ULTIMATE LOAD

### SUMMARY STANDARD

<table>
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<th>MODEL</th>
<th>TUBE SIZE (IN)</th>
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### MATERIAL DESIGNATION

- ALL BASE PLATES: ASTM A521 GRADE 50
- ALL TUBES: ASTM A500 GRADE C UNEQUAL TUBE STRENGTH OF 1X3.00
- HOT-DIP GALVANIZED AFTER FABRICATION.
- URETHANE INSULATION REDUCES CONDENSATION; COMMONLY USED IN GREEN CONSTRUCTION.

### DESIGN ELEMENTS OF THE CONNECTION OF THE ANCHOR TO THE STRUCTURE

- REINFORCING STEEL DETAILING, LOCALIZED STEEL STIFFENERS, STEEL BRACING, ADHESIVE OR WELDED CONNECTION DETAILS (INCLUDING ANY FIELD WELDS), CONCRETE COMPRESSIVE STRENGTH, VERTICAL AND HORIZONTAL LOAD CARRYING MEMBERS AND ASSOCIATED CONNECTIONS, FILED ETC.

### EXISTING OR PROPOSED BUILDING

- SUPERVISION OF A PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS SUPERVISION OF A PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS SUPPORT LOADS.

### SUPPORT LOADS

a) 1,250 LB. WORKING LOAD LIMIT
b) 5,000 LB. ULTIMATE LOAD

### Layout Compliance

- LAYOUT COMPLIES WITH APPLICABLE LOCAL AND NATIONAL CODES, REGULATIONS, AND SAFETY FOR THE EXISTING OR PROPOSED BUILDING. EXISTING OR PROPOSED BUILDING CONFIGURATION AND DESIGN ELEMENTS OF THE CONNECTION OF THE ANCHOR TO THE STRUCTURE. THESE

### SUMMARY

- 5. ENSURING THAT THE APPLICATION IN WHICH THE ANCHOR(S) ARE USED AND THE STRUCTURE TO
**ROOF ANCHOR WRAPPED AROUND STEEL BEAM**

**SUMMIT STANDARD ANCHOR MODELS**

<table>
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<tr>
<th>MODEL #</th>
<th>HOLESIZE IN BASEPLATE</th>
<th>TUBE LENGTH (T)</th>
<th>PIPE SIZE (P)</th>
<th>BASE PLATE SIZE (B)</th>
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<td>12&quot; X 12&quot; X 5&quot;</td>
<td>12&quot;</td>
<td>10&quot; x 10&quot; x 5&quot;</td>
<td></td>
<td>2&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>SM-1-1-12-60-58-06</td>
<td>3/4&quot; 12&quot; O.D. SCH.40, x 30&quot;</td>
<td>12&quot; X 12&quot; X 5&quot;</td>
<td>12&quot;</td>
<td>10&quot; x 10&quot; x 5&quot;</td>
<td></td>
<td>2&quot;</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

**MATERIAL DESIGNATION:**
- ALL FORGED PARTS ARE 1035
- ALL STAINLESS STEEL PARTS ARE 18-8

**APPROVALS**
- SM-1-1-12-24-58-06: POR: #01550, #01595
- SM-1-1-12-30-58-06: POR: #01550, #01595
- SM-1-1-12-42-58-06: POR: #01550, #01595
- SM-1-1-12-60-58-06: POR: #01550, #01595
- SM-1-1-12-72-58-06: POR: #01550, #01595
- SM-1-1-12-90-58-06: POR: #01550, #01595

**MARKETING DRAWING FOR ANCHOR WRAPPED AROUND CORRUGATED DECK**

**ROOF ANCHOR WRAPPED AROUND CORRUGATED DECK**

**SUMMIT MODEL #: SM-1-ROOF ANCHOR**

**ROOF ANCHOR WRAPPED AROUND STEEL BEAM**

**SUMMIT MODEL #: SM-1-ROOF ANCHOR**

**MATERIAL DESIGNATION:**
- ALL FORGED PARTS ARE 1035
- ALL STAINLESS STEEL PARTS ARE 18-8
- ALL Threaded Parts are 100%非。}

**APPROVALS**
- SM-1-1-12-24-58-06: POR: #01550, #01595
- SM-1-1-12-30-58-06: POR: #01550, #01595
- SM-1-1-12-42-58-06: POR: #01550, #01595
- SM-1-1-12-60-58-06: POR: #01550, #01595
- SM-1-1-12-72-58-06: POR: #01550, #01595
- SM-1-1-12-90-58-06: POR: #01550, #01595

**MARKETING DRAWING FOR ANCHOR WRAPPED AROUND STEEL BEAM**

**MARKETING DRAWING FOR ANCHOR WRAPPED AROUND CORRUGATED DECK**

**MARKETING DRAWING FOR ANCHOR WRAPPED AROUND STEEL BEAM**

**MARKETING DRAWING FOR ANCHOR WRAPPED AROUND CORRUGATED DECK**
**SM-FOM:** OPTIONAL MOLDED URETHANE INSULATION REDUCES THERMAL TRANSFER AND CONDENSATION; COMMONLY USED IN GREEN CONSTRUCTION.

**BRACING DESIGN:** BRACING DESIGNED BY OTHERS, TYPICALLY REQUIRED TO SUPPORT LOADS. CONSULT FOR.

**APPLICATION VARIATION:** APPLICATION VARIATION FOR STRENGTHENING BEAMS FOR LOADS IMPOSED BY ANCHORS. CONSULT WITH PROJECT ENGINEER.
SM-5 Series - 4 Stud CIP Pattern Anchor

SM-5 FORGED PAD EYE, QUENCHED AND TEMPERED. ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER FABRICATION.

HSS TUBE: HEIGHT, DIAMETER, AND THICKNESS AS REQUIRED FOR APPLICATION.

SM-FORM: OPTIONAL MODIFIED URUSHANE INSULATION INJECTED INSIDE H.S.S. TUBE REDUCES THERMAL TRANSFER AND CONDENSATION. COMMONLY USED IN GREEN CONSTRUCTION.

SM-STUD: 2” or 3” ALUMINUM STUDS, WELDED TO BASE PLATE. TOP AND BOTTOM.

SM-PLT: SIMPLE PLATE BASE PLATE SIZED AS REQUIRED FOR APPLICATION.

SM-5-12-45-78-07 3/4” 45” 41
SM-5-12-36-34-06 5/8” 36” 41
SM-5-10-24-58-06 5/8” 24” 41
SM-5-10-22-58-06 5/8” 22” 41
SM-5-8-12-12-06 5/8” 12” 31
SM-5-8-18-58-06 5/8” 18” 31
SM-5-8-15-58-06 5/8” 15” 31
SM-5-10-24-58-06 3/4” 58” 51
SM-5-10-24-58-06 1” 58” 51
SM-5-15-20-58-06 1” 58” 51
SM-5-15-20-58-06 1 1/4” 58” 51
SM-5-15-20-58-06 1 1/2” 58” 51
SM-5-15-20-58-06 2” 58” 51
SM-5-12-30-34-06 5/8” 30” 41
SM-5-12-30-34-06 3/4” 34” 41
SM-5-12-30-34-06 1” 34” 41
SM-5-12-30-34-06 1 1/4” 34” 41
SM-5-12-30-34-06 1 1/2” 34” 41
SM-5-12-30-34-06 2” 34” 41

SM-5 Series - 4 Stud CIP Pattern Anchor

SM-5-18-58-06
**SM-6 Series - Single Pipe CIP Anchor**

**SM-6 FORGED PIG EYE, QUENCHED AND TEMPERED, ENTIRE ANCHOR HOT-DIPPED GALVANIZED AFTER FABRICATION.**

**WEIGHT: HEIGHT, DIAMETER, AND THICKNESS AS REQUIRED FOR APPLICATION.**

**SM-FOR: OPTIONAL MOLDED URETHANE INSULATION INJECTED INSIDE 6 1/2” TUBE REDUCES THERMAL TRANSFER AND CONDENSATION; COMMONLY USED IN GREEN CONSTRUCTION.**

**SM-FLT BASE PLATE SIZED AS REQUIRED FOR APPLICATION.**

---

**ANCHOR LOADING:**

- **In ANY Direction** 2,500 LB. PROOF LOAD
- **In ANY Direction** 1,250 LB. WORKING LOAD

**ENGINEERING/ANALYSIS PROVIDED UNDER THIS STAMP AND SEAL BY DHC, IS ONLY FOR EQUIPMENT INSTALLATION OTHERWISE THAN AGED EXISTING OR PROPOSED BUILDING. EXISTING OR PROPOSED BUILDING CONFIGURATION AND ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO: MAIN STRUCTURAL ELEMENTS WHICH INCLUDES DESIGN ELEMENTS OF THE CONNECTION OF THE ANCHOR TO THE STRUCTURE. THESE FORCES ETC. THE PROJECT ENGINEER OF RECORD FOR THE BUILDING IS RESPONSIBLE FOR THE LOADS INDICATED ON THE DRAWINGS INCLUDING MOMENT, SHEAR, TORSION AND AXIAL REINFORCING STEEL DETAILING, LOCALIZED STEEL STIFFENERS, STEEL BRACING, ADHESIVE OR SHEARTHING, AS REQUIRED TO RESIST THE VERTICAL AND HORIZONTAL LOAD CARRYING MEMBERS AND ASSOCIATED CONNECTIONS, FILED 2X4, 2X6, 2X8, 2X10, 2X12 IF REQUIRED.**

**SM-6-6-xx-xx**

**SUMMIT STANDARD ANCHOR MODELS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>TUBE LENGTH (TI)</th>
<th>EMBED DEPTH (Es)</th>
<th>MIN. SLAB THICKNESS (Ms)</th>
<th>TUBE SIZING (Rch.)</th>
<th>BASE PLATE SIZE (Bp)</th>
<th>EDGE DISTANCE (Ed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-6-6-12</td>
<td>6&quot;</td>
<td>4,000 PSI - 6,000 PSI</td>
<td>2&quot;</td>
<td>SCH.40, x .216&quot;</td>
<td>6&quot;x6&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>SM-6-6-12-12</td>
<td>12&quot;</td>
<td>4,000 PSI - 7,000 PSI</td>
<td>2&quot;</td>
<td>SCH.40, x .216&quot;</td>
<td>6&quot;x6&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>SM-6-6-18-12</td>
<td>18&quot;</td>
<td>4,000 PSI - 7,000 PSI</td>
<td>2&quot;</td>
<td>SCH.40, x .216&quot;</td>
<td>6&quot;x6&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>SM-6-6-24-12</td>
<td>24&quot;</td>
<td>4,000 PSI - 8,000 PSI</td>
<td>2&quot;</td>
<td>SCH.80, x .337&quot;</td>
<td>6&quot;x6&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>SM-6-6-30-12</td>
<td>30&quot;</td>
<td>4,000 PSI - 9,000 PSI</td>
<td>2&quot;</td>
<td>SCH.80, x .337&quot;</td>
<td>6&quot;x6&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>SM-6-6-38-12</td>
<td>38&quot;</td>
<td>4,000 PSI - 10,000 PSI</td>
<td>2&quot;</td>
<td>SCH.80, x .337&quot;</td>
<td>6&quot;x6&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>SM-6-6-49-12</td>
<td>49&quot;</td>
<td>4,000 PSI - 12,000 PSI</td>
<td>2&quot;</td>
<td>SCH.80, x .337&quot;</td>
<td>6&quot;x6&quot;</td>
<td>20&quot;</td>
</tr>
</tbody>
</table>

**SM-6-6-xx-xx EMBED DEPTH IS MINIMAL; VERIFY FLASHING CONDITION IF REQUIRED.**

---

**Contact Us for More Information:**

www.summitanchor.com  
(800) 372-1098  
info@summitanchor.com
NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

2. WHEN INSTALLED PROPERLY, SUMMIT ANCHOR STANDARD PRODUCTS ARE DESIGNED TO
   TOLL FREE: 800.372.1098
   WEBSITE: www.summitanchor.com

ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO: MAIN STRUCTURAL ELEMENTS WHICH INCLUDES

CONNECTION DETAILS (INCLUDING ANY FIELD WELDS), CONCRETE COMPRESSIVE STRENGTH,

STANDARDS FOR THE INTENDED USE.

"Your one stop provider for all fall protection,

suspended maintenance equipment, installation and testing."

SM-81 Series - 2 Bolt Pattern Anchor

ANCHOR MOUNTED WITH 2 EPOXY FASTENERS

SUMMIT STANDARD EPOXY MOUNTED ANCHOR

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HOE SIZE PLATE (P)</th>
<th>PIPE SIZE (P)</th>
<th>MINIMUM DEPTH (B)</th>
<th>CONCRETE PSI</th>
<th>HAS RED DESCRIPTION</th>
<th>HAS RED DISTANCE (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-18-0-12-V-06</td>
<td>1 1/2&quot;</td>
<td>8&quot;</td>
<td>4&quot;</td>
<td>3,000</td>
<td>+</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM-18-1-12-V-06</td>
<td>1 1/2&quot;</td>
<td>8&quot;</td>
<td>4&quot;</td>
<td>3,000</td>
<td>+</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM-18-2-12-V-06</td>
<td>1 1/2&quot;</td>
<td>8&quot;</td>
<td>4&quot;</td>
<td>3,000</td>
<td>+</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM-18-3-12-V-06</td>
<td>1 1/2&quot;</td>
<td>8&quot;</td>
<td>4&quot;</td>
<td>3,000</td>
<td>+</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

ANCHOR MOUNTED WITH 2 EPOXY FASTENERS

SUMMIT MODEL #: SM-81 ROOF/WALL ANCHOR

SM-1: FORGED PAD EYE, QUENCHED AND TEMPERED. ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER

FABRICATION

SM-1: FORGED PAD EYE, QUENCHED AND TEMPERED. ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER

FABRICATION

SM-HDA-TF M10X100/20 - MARKETING DRAWING FOR ANCHORS MOUNTED WITH UNDERCUT FASTENERS

SUMMIT MODEL #: SM-81 ROOF/WALL ANCHOR

Your one stop provider for all fall protection,

suspended maintenance equipment, installation and testing.
WALL ANCHOR BOLTED THROUGH CONCRETE WALL
SUMMIT MODEL #: SM-81

1. ASSURANCE THAT SUMMIT ANCHOR PRODUCTS ARE ATTACHED TO ADEQUATE AND
2. WHEN INSTALLED PROPERLY, SUMMIT ANCHOR STANDARD PRODUCTS ARE DESIGNED TO
3. THE UNDERSTANDING THAT ANCHORS MAY FAIL DUE TO IMPROPER INSTALLATION OR
4. PROVIDING INFORMATION TO THE OWNER, OR THEIR REPRESENTATIVE, VERIFYING THE ANCHOR
5. ENSURING THAT THE APPLICATION IN WHICH THE ANCHOR(S) ARE USED AND THE STRUCTURE TO

ALWAYS ATTACH TO WALL 1 INCH MINUS THE THICKNESS OF THE WALL

WALL ANCHOR WRAPPED AROUND STEEL TUBE
SUMMIT MODEL #: SM-81-XX-XX

SUMMARY OF STANDARD MATERIALS

- SM-81: FORGED PAD EYE, QUENCHED AND TEMPERED, ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER FABRICATION.
- HSS TUBE: HEIGHT AND DIAMETER AS REQUIRED FOR APPLICATION.
- SM-81(B): STAINLESS STEEL THREADED RODS WITH STAINLESS STEEL, HEAVY HEX NUTS, GALVANIZED FLAT, AND STAINLESS LOCK WASHERS.
- SM-PLT: 8" X 4" X 2" BACK PLATE

SUMMIT STANDARD

<table>
<thead>
<tr>
<th>MODEL</th>
<th>TUBE LENGTH</th>
<th>TUBE DIAMETER</th>
<th>WALL PLATE</th>
<th>PLATE THICKNESS</th>
<th>TUBE TO WALL WELD</th>
<th>BASE PLATE THICKNESS</th>
<th>FLANGE SIDE</th>
<th>MN. EDGE DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-81-0-0-0-0-0</td>
<td>5/8&quot;</td>
<td>1&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>1/2&quot;</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
</tr>
<tr>
<td>SM-81-0-0-0-0-0</td>
<td>5/8&quot;</td>
<td>2&quot;</td>
<td>5/8 O.D. 304-40 x .216</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM-81-0-0-0-0-0</td>
<td>5/8&quot;</td>
<td>4&quot;</td>
<td>5/8 O.D. 304-40 x .216</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
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<td></td>
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</tbody>
</table>

SUMMIT STANDARD ANCHOR WRAPPED AROUND STEEL TUBE

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HOLE SIZE IN BASE PLATE</th>
<th>MAX. PIPE SIZE</th>
<th>PIPE LENGTH</th>
<th>TUBE TO WALL WELD</th>
<th>BASE PLATE SIZE</th>
<th>HOLE SPACING</th>
<th>MN. EDGE DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-81-8-12-58-V-06</td>
<td>5/8&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM-81-8-12-58-V-06</td>
<td>5/8&quot;</td>
<td>2&quot;</td>
<td>5/8 O.D. 304-40 x .216</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM-81-8-12-58-V-06</td>
<td>5/8&quot;</td>
<td>4&quot;</td>
<td>5/8 O.D. 304-40 x .216</td>
<td>6&quot;</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SM-85 Series - 2 Bolt Pattern Anchor

**CAST IN PLACE ANCHOR**

SUMMIT MODEL #: SM-85

- FORGED PAD EYE, QUENCHED AND TEMPERED, ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER FABRICATION.
- HSS TUBE: HEIGHT AND DIAMETER SIZE AS REQUIRED FOR APPLICATION.
- SW-FLOW: OPTIONAL MOLDED URETHANE INSULATION REDUCES THERMAL TRANSFER AND CONDUCTION, COMMONLY USED IN GREEN CONSTRUCTION.
- SW-FLP: BASE PLATE SEE THE TABLE BELOW COLUMN (B).
- SW-STUD: NELSON STUDS, WELDED TO BASE PLATE.

**SUMMIT STANDARD EPOXY MOUNTED ANCHOR**

- FLEXURAL STRENGTH TO BASE WELD SIZE (IN)
- MINIMUM THICKNESS (IN)
- MINIMUM EDGE DISTANCE (IN)
- USE EPOXY BASE PLATE SIZE (IN)

**SM-85 Series - 2 Bolt Pattern Anchor**

SM-85 Series - 2 Bolt Pattern Anchor

**CAST IN PLACE ANCHOR**

SUMMIT MODEL #: SM-85

- FORGED PAD EYE, QUENCHED AND TEMPERED, ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER FABRICATION.
- HSS TUBE: HEIGHT AND DIAMETER SIZE AS REQUIRED FOR APPLICATION.
- SW-FLOW: OPTIONAL MOLDED URETHANE INSULATION REDUCES THERMAL TRANSFER AND CONDUCTION, COMMONLY USED IN GREEN CONSTRUCTION.
- SW-FLP: BASE PLATE SEE THE TABLE BELOW COLUMN (B).
- SW-STUD: NELSON STUDS, WELDED TO BASE PLATE.

**SUMMIT STANDARD EPOXY MOUNTED ANCHOR**

- FLEXURAL STRENGTH TO BASE WELD SIZE (IN)
- MINIMUM THICKNESS (IN)
- MINIMUM EDGE DISTANCE (IN)
- USE EPOXY BASE PLATE SIZE (IN)
Various Attachment Details provided by Summit Anchor Co.
**WALL ANCHOR MOUNTED WITH CHEMICAL FASTENERS**

**SUMMIT MODEL #: SM-81-XX-XX**

**SM-81: FORGED PAD EYE, QUENCHED AND TEMPERED. ENTIRE ANCHOR HOT-DIP GALVANIZED AFTER FABRICATION.**

- **Material Designation:**
  - Steel: AISI 1035
  - HSS Tube: SM-1
  - Insulation: SM-PLT-TS
  - Hardener: SM-FOM
  - Bolts: SM-ANCH-185-7

**SUMMIT STANDARD ANCHOR**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dia (in)</th>
<th>Tube (in)</th>
<th>Plate (in)</th>
<th>Anchor Body (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.P. 1</td>
<td>2.5</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>B.P. 2</td>
<td>3</td>
<td>1.5</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>B.P. 3</td>
<td>3.5</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

**SUMMIT STANDARD ANCHOR INSTALLATION**

- Grout shall be proportioned to ASTM C476. Min. compressive strength 3,000 psi.

**ASSURANCE THAT SUMMIT ANCHOR PRODUCTS ARE ATTACHED TO ADEQUATE AND COMPATIBLE STRUCTURE.**

**ALL PLATES: ASTM A572 GR 50**

**a)** 2,500 LB. PROOF LOAD (TEST LOAD WITHOUT PERMANENT DEFORMATION)

**b)** 5,000 LB. ULTIMATE LOAD

**c)** F 436 HARDENER GALVANIZED

---

**RECESSED BALCONY ANCHOR**

**SUMMIT MODEL #: SM-1-X-X-X ROOF ANCHOR**

- **Material Designation:**
  - Steel: AISI 1035
  - Insulation: SM-PLT-TS
  - Hardener: SM-FOM

**SUMMIT STANDARD ANCHOR INSTALLATION**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dia (in)</th>
<th>Tube (in)</th>
<th>Plate (in)</th>
<th>Anchor Body (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.P. 1</td>
<td>2.5</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>B.P. 2</td>
<td>3</td>
<td>1.5</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>B.P. 3</td>
<td>3.5</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

**SUMMIT STANDARD ANCHOR INSTALLATION**

- Grout shall be proportioned to ASTM C476. Min. compressive strength 3,000 psi.

---

**SUMMIT Anchor Company Inc.**

4507 Metropolitan Ct., Suite F
Frederick, MD 21704
Tel: 301.874.4941, Fax: 301.620.9819
Web: www.summitanchor.com

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**Your one stop provider for all fall protection, suspended maintenance equipment, installation and testing.**

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Frederick, MD 21704
Tel: 301.874.4941, Fax: 301.620.9819
Web: www.summitanchor.com
NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

- APPLICABLE LOADS INDICATED ON THIS DRAWING. THE STRUCTURE AND FIELD CONNECTION DETAILS MUST BE FULLY DEVELOPED TO RESIST THE APPLICABLE LOADS INDICATED ON THIS DRAWING. THE PROJECT ENGINEER OF RECORD FOR PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS EQUIPMENT. ADDITIONALLY, ANCHORS SHALL BE TESTED AND CERTIFIED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS EQUIPMENT.
- CLEANING SAFETY STANDARD). THE UNDERSTANDING THAT ANCHORS MAY FAIL DUE TO IMPROPER INSTALLATION OR INADEQUATE SUPPORTING STRUCTURE. SERIOUS INJURY OR DEATH MAY RESULT FROM ANCHOR FAILURE. INSTALLATION OF ANCHORS MUST BE PERFORMED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS EQUIPMENT.
- MATERIAL DESIGNATION:
  - ALL TUBES: ASTM A500 GR C
  - FORGED PAD EYE, FORGED AND TEMPERED, ENTIRE ANCHOR HOT DIP GALVANIZED AFTER FABRICATION.
  - HSS TUBE: HEIGHT, DIAMETER, AND THICKNESS PER TABLE.
  - OPTIONAL MOLDED URETHANE INSULATION REDUCES THERMAL TRANSFER AND CONDENSATION; COMMONLY USED IN GREEN CONSTRUCTION.
  - BRACING DESIGNED BY OTHERS, TYPICALLY REQUIRED TO SUPPORT LOADS. CONSULT EOR.
1. ASSURANCE THAT SUMMIT ANCHOR PRODUCTS ARE ATTACHED TO ADEQUATE AND COMPATIBLE STRUCTURE.

NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

3. THE UNDERSTANDING THAT ANCHORS MAY FAIL DUE TO IMPROPER INSTALLATION OR INADEQUATE SUPPORTING STRUCTURE. SERIOUS INJURY

4. PROVIDING INFORMATION TO THE OWNER, OR THEIR REPRESENTATIVE, VERIFYING THE ANCHOR LAYOUT COMPLIES WITH APPLICABLE LOCAL AND NATIONAL CODES, REGULATIONS, AND SAFETY STANDARDS FOR THE INTENDED USE.

PROJECT ENGINEER OF RECORD FOR

STEEL DETAILING, LOCALIZED STEEL STIFFENERS, STEEL BRACING, ADHESIVE OR MECHANICAL ANCHOR FASTENERS, OR ANY OTHER ELEMENT ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING CONFIGURATION AND PROPERTIES HAVE NOT BEEN REVIEWED. EQUIPMENT IS ANALYZED FOR STATED LOADS ONLY. INTENDED USAGE OF EQUIPMENT IS OUT OF CLEANING SAFETY STANDARD).

ENGINEERING/ANALYSIS PROVIDED UNDER THIS STAMP AND SEAL BY DHC, IS ONLY FOR EQUIPMENT DESIGN SHOWN ON THESE PLANS AND IN NO WAY REPRESENTS ENGINEERING ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING. EXISTING OR PROPOSED BUILDING CONFIGURATION

ANCHOR LOADING REQUIREMENTS:

a) 1,250 LB. WORKING LOAD LIMIT (ALLOWABLE LOAD)

b) 2,500 LB. PROOF LOAD (TEST LOAD WITHOUT PERMANENT DEFORMATION)

c) 5,000 LB. ULTIMATE LOAD (MAX. LOAD WITHOUT PERMANENT DEFORMATION)

MARKETING DRAWING FOR ANCHORS WRAPPED AROUND BEAM WITH CROSS BRACING

MARKETING DRAWING FOR ANCHORS WELDED ON TOP OF COLUMN

MARKETING DRAWING FOR ANCHORS WELDED ON TOP OF COLUMN

NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

3. THE UNDERSTANDING THAT ANCHORS MAY FAIL DUE TO IMPROPER INSTALLATION OR INADEQUATE SUPPORTING STRUCTURE. SERIOUS INJURY

4. PROVIDING INFORMATION TO THE OWNER, OR THEIR REPRESENTATIVE, VERIFYING THE ANCHOR LAYOUT COMPLIES WITH APPLICABLE LOCAL AND NATIONAL CODES, REGULATIONS, AND SAFETY STANDARDS FOR THE INTENDED USE.

PROJECT ENGINEER OF RECORD FOR

STEEL DETAILING, LOCALIZED STEEL STIFFENERS, STEEL BRACING, ADHESIVE OR MECHANICAL ANCHOR FASTENERS, OR ANY OTHER ELEMENT ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING CONFIGURATION AND PROPERTIES HAVE NOT BEEN REVIEWED. EQUIPMENT IS ANALYZED FOR STATED LOADS ONLY. INTENDED USAGE OF EQUIPMENT IS OUT OF CLEANING SAFETY STANDARD).

ENGINEERING/ANALYSIS PROVIDED UNDER THIS STAMP AND SEAL BY DHC, IS ONLY FOR EQUIPMENT DESIGN SHOWN ON THESE PLANS AND IN NO WAY REPRESENTS ENGINEERING ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING. EXISTING OR PROPOSED BUILDING CONFIGURATION

ANCHOR LOADING REQUIREMENTS:

a) 1,250 LB. WORKING LOAD LIMIT (ALLOWABLE LOAD)

b) 2,500 LB. PROOF LOAD (TEST LOAD WITHOUT PERMANENT DEFORMATION)

c) 5,000 LB. ULTIMATE LOAD (MAX. LOAD WITHOUT PERMANENT DEFORMATION)

MARKETING DRAWING FOR ANCHORS WRAPPED AROUND BEAM WITH CROSS BRACING

MARKETING DRAWING FOR ANCHORS WELDED ON TOP OF COLUMN

MARKETING DRAWING FOR ANCHORS WELDED ON TOP OF COLUMN
Your one stop provider for all fall protection, suspended maintenance equipment, installation and testing.

2. WHEN INSTALLED PROPERLY, SUMMIT ANCHOR STANDARD PRODUCTS ARE DESIGNED TO SUPPORT LOADS AS FOLLOWS:

   a) 1,250 LB. WORKING LOAD LIMIT (ALLOWABLE LOAD)
   b) 2,500 LB. PROOF LOAD (TEST LOAD WITHOUT PERMANENT DEFORMATION)
   c) 5,000 LB. ULTIMATE LOAD (MAX. LOAD WITHOUT PERMANENT DEFORMATION)

ANCHOR LOADING REQUIREMENTS:

LOAD MAY BE APPLIED IN ANY DIRECTION

NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

1. ASSURANCE THAT SUMMIT ANCHOR PRODUCTS ARE ATTACHED TO ADEQUATE AND COMPATIBLE STRUCTURE.
2. WHEN INSTALLED PROPERLY, SUMMIT ANCHOR STANDARD PRODUCTS ARE DESIGNED TO SUPPORT LOADS AS FOLLOWS:

   a) 1,250 LB. WORKING LOAD LIMIT (ALLOWABLE LOAD)
   b) 2,500 LB. PROOF LOAD (TEST LOAD WITHOUT PERMANENT DEFORMATION)
   c) 5,000 LB. ULTIMATE LOAD (MAX. LOAD WITHOUT PERMANENT DEFORMATION)

3. THE UNDERSTANDING THAT ANCHORS MAY FAIL DUE TO IMPROPER INSTALLATION OR INADEQUATE SUPPORTING STRUCTURE. SERIOUS INJURY OR DEATH COULD RESULT.
4. PROVIDING INFORMATION TO THE OWNER, OR THEIR REPRESENTATIVE, VERIFYING THE ANCHOR LAYOUT COMPLIES WITH APPLICABLE LOCAL AND PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS EQUIPMENT. ADDITIONALLY, ANCHORS SHALL BE TESTED AND CERTIFIED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER WITH EXPERIENCE IN SUSPENDED ACCESS EQUIPMENT.

5. ENSURE THAT THE APPLICATION IN WHICH THE ANCHOR(S) ARE USED AND THE STRUCTURE TO WHICH IT IS ATTACHED WILL SUPPORT THE LOADS INDICATED ON THE DRAWINGS INCLUDING MOMENT, SHEAR, TORSION AND AXIAL FORCES ETC. THE PROJECT ENGINEER OF RECORD FOR THE BUILDING IS RESPONSIBLE FOR THE DESIGN ELEMENTS OF THE CONNECTION OF THE ANCHOR TO THE STRUCTURE. THESE ELEMENTS HAVE NOT BEEN REVIEWED. EQUIPMENT IS ANALYZED FOR STATED LOADS ONLY. INTENDED USAGE OF EQUIPMENT IS OUT OF RANGE.

6. ENGINEERING/ANALYSIS PROVIDED UNDER THIS STAMP AND SEAL BY DHC, IS ONLY FOR EQUIPMENT DESIGN SHOWN ON THESE PLANS AND IN NO WAY REPRESENTS ENGINEERING ASSOCIATED WITH THE EXISTING OR PROPOSED BUILDING. EXISTING OR PROPOSED BUILDING CONFIGURATION AND PROPERTIES HAVE NOT BEEN REVIEWED.
Your one stop provider for all fall protection, suspended maintenance equipment, installation and testing.

5. Ensure that the application in which the anchor(s) are used and the structure to which it is attached will support the loads.

2. When installed properly, Summit Anchor standard products are designed to support loads as follows:

   a) 1,250 lb. working load limit (allowable load)
   b) 2,500 lb. proof load (test load without permanent deformation)
   c) 5,000 lb. ultimate load (max. load without permanent deformation)

6. Engineering/analysis provided under this stamp and seal by DHC, is only for equipment design shown on these plans and in no way represents engineering associated with the existing or proposed building. Existing or proposed building configuration typically required to support loads. Consult your.

NOTE - CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING:

1. Providing information to the owner, or their representative, verifying the anchor layout complies with applicable local and national codes, regulations, and safety standards for the intended use.

2. When designing the area, ensure that the application in which the anchor(s) are used and the structure to which it is attached will support the loads.

3. The understanding that anchors may fail due to improper installation or inadequate supporting structure. Serious injury may be caused.

4. Providing information to the owner, or their representative, verifying the anchor layout complies with applicable local and national codes, regulations, and safety standards for the intended use.

CONCRETE REQUIREMENTS:

- DRY MIX CONCRETE REQUIRED TO SUPPORT THE ABOVE LOADS.
- INCLUDING, BUT ARE NOT LIMITED TO: MAIN STRUCTURAL ELEMENTS WHICH INCLUDES VERTICAL AND HORIZONTAL LOAD CARRYING MEMBERS AND STEEL DETAILS, LOCALIZED STEEL STIFFENERS, STEEL BRACING, ADHESIVE OR MECHANICAL ANCHOR FASTENERS, OR ANY OTHER ELEMENT OF CONSTRUCTION.

5. Ensure that the application in which the anchor(s) are used and the structure to which it is attached will support the loads.

6. Engineering/analysis provided under this stamp and seal by DHC, is only for equipment design shown on these plans and in no way represents engineering associated with the existing or proposed building. Existing or proposed building configuration typically required to support loads. Consult your.

www.summitanchor.com