

Face of Slab Exterior Corner Engineering Request Form

To provide you with the best customer and engineering services, please:

- Provide the requested Contact Information, fields 1 to 10 of page 1.
- Provide the requested Project Information, fields 1 to 27 of page 3.
- Page 4 provides description of fields related to Project Information.
- E-mail the form to **US+CA.HAC@Hilti.com** or to your local Hilti Field Representative.
- Provide any additional information such as architectural and structural drawings, clip geometry, additional sketches, etc. that may help to clarify and optimize the HAC design.

Contact Information

1. Project Name:

2. Company Name:

3. Project City: 4.State:

5. Contact Person:

6. Phone Number:

7. Email Address:

8. Date Engineering Solution Required:

9. Bid Date (if applicable):

10. SAP Account (if applicable):



Superior Performance

Face of Slab Exterior Corner Engineering Request Form

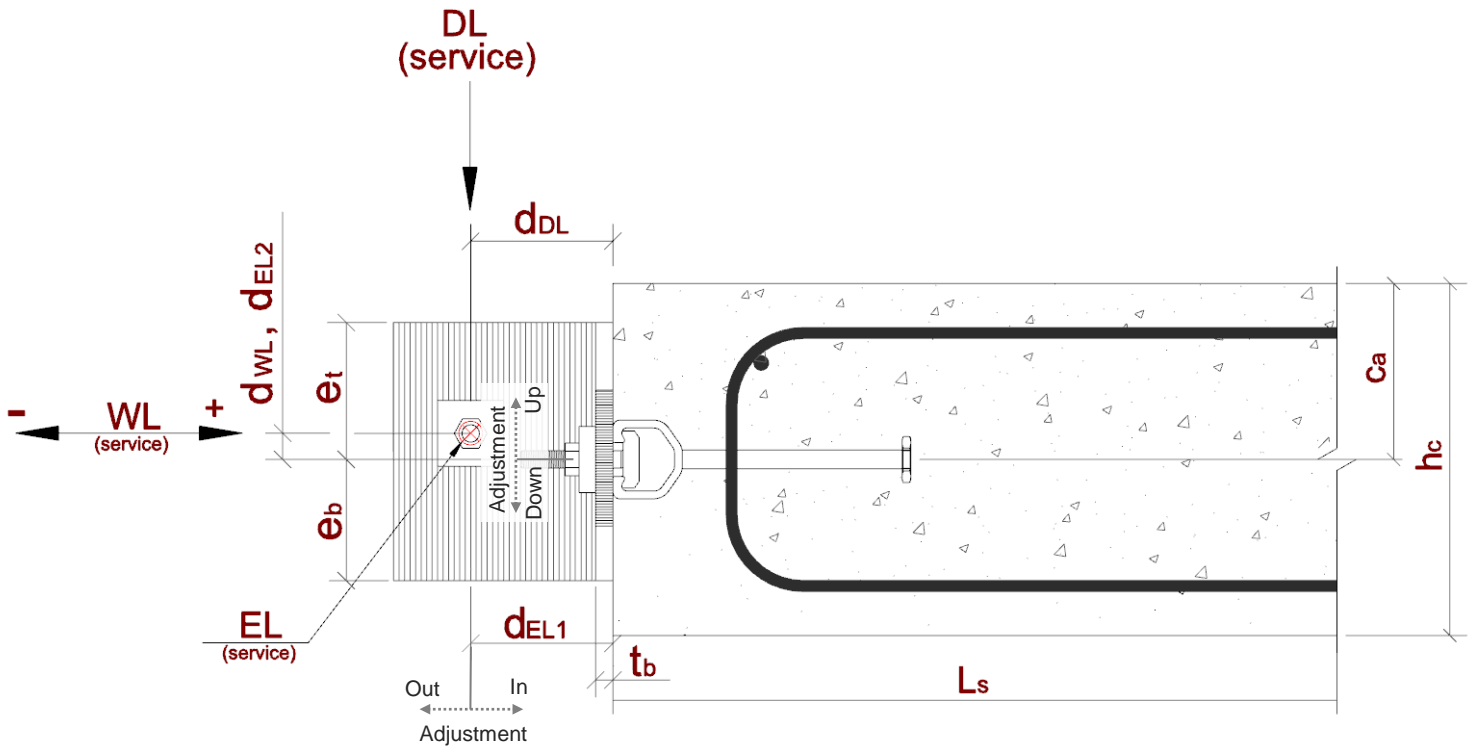


Figure 1.0 Typical Section - Face of Slab

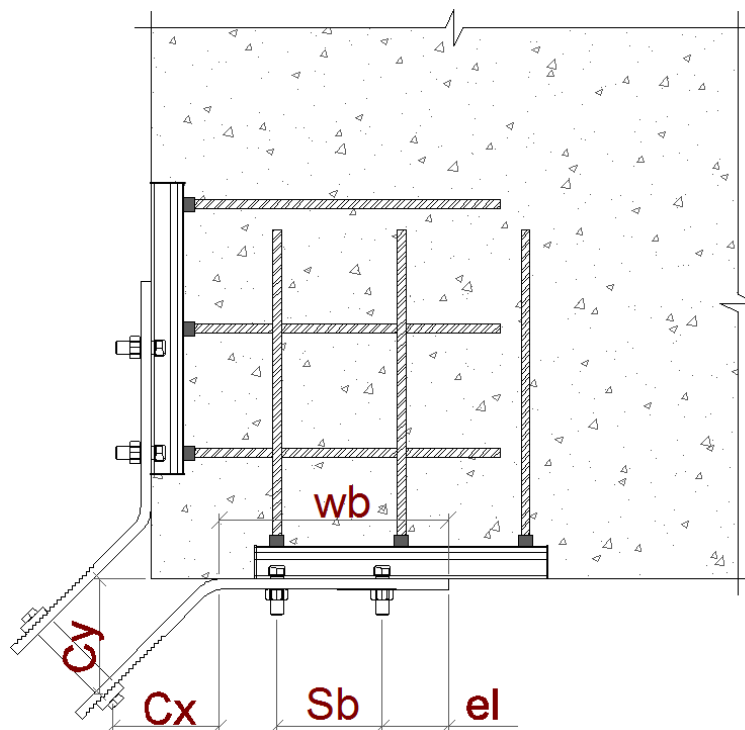


Figure 2.0 Plan View - Face of Slab at Exterior Corner

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Project Information

Project Name:

Condition No.: Detail No.:

Materials

1. Concrete Strength, f_c : psi
2. Lightweight Concrete:
3. Density of Concrete, ρ : pcf
4. Reinforcement Type:
5. Yield Strength, f_y : psi
6. Stirrup Spacing, s : in
7. Stirrup Diameter, d_a : in

Geometry

8. h_c : in
9. C_a : in
10. e_b : in
- 10b. e_t : in
11. L_s : in
12. t_b : in
13. W_b : in
- 13b. e_t : in
14. c_x : in
- 14b. c_y : in
15. S_b : in

16. Bracket Adjustment

Out: in In: in Up: in Down: in

Loads

17. Building Code with Year:

18. Cracking at Service Loads:

19. DL : lbs

20. d_{DL} : in

21. WL^- : lbs

22. d_{WL^-} : in

23. WL^+ : lbs

24. d_{WL^+} : in

*25. EL : lbs

*26. d_{EL1} : in

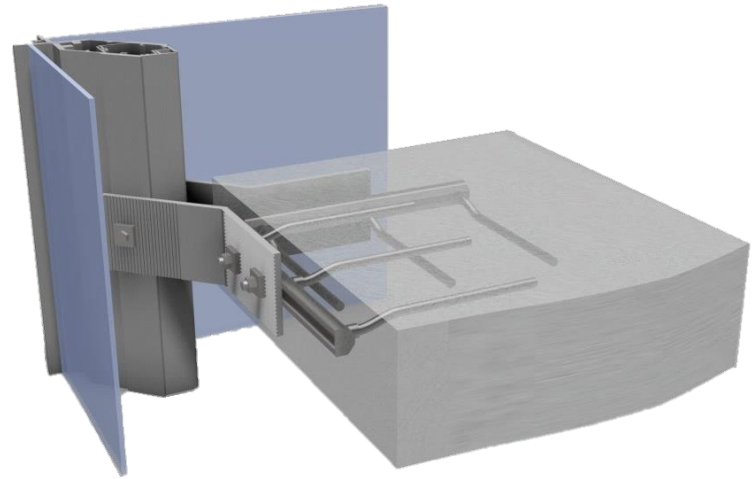
*Seismic information if applicable only.

*27. d_{EL2} : in

If loads are unknown, please provide the following information:

- a. Floor to Floor Ht.: ft
- b. Mullion Centers: ft
- c. Wind Pressure: psf
- d. Wind Suction: psf
- e. Curtain Wall DL: psf

Comments:



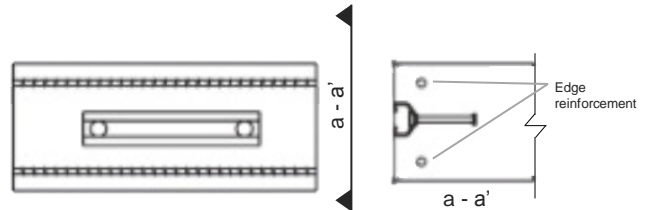
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Materials

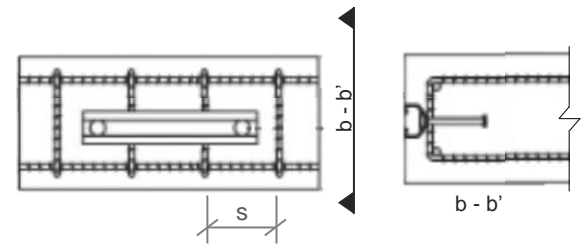
1. **Concrete Strength, $f'c$:**
Specified 28 day compressive strength of concrete.
5. **Yield Stress, f_y :**
Specified yield strength of reinforcement.
6. **Stirrup Spacing, s :**
Specified center to center offset stirrup distance.

4. Reinforcement Type:

Straight edge reinforcement – anchor channel in concrete with straight edge reinforcement:



Reinforcement with stirrups – anchor channel in concrete with edge reinforcement and stirrups with a spacing “ s ”:



12. Thickness of Bracket, t_b :

Specified thickness of bracket.

13b. Back Span Length, e_l :

Distance from outer t-bolt to end of bracket.

14. Resultant Force Distance, c_y :

Perpendicular distance from face of slab to resultant force.

16. Bracket Adjustment:

Provide the maximum and minimum vertical and horizontal adjustment provided by the bracket.

Geometry

8. **Thickness of the concrete member, h_c :**
Thickness of the concrete member where the anchor channel will be installed, typically slab (applicable to any other concrete members).
9. **Edge Distance, C_a :**
Distance from center of channel to edge of slab.
10. **Bracket Bottom Distance, e_b :**
Distance from the center of the anchor channel to the lower end of the bracket.
- 10b. **Bracket Top Distance, e_t :**
Distance from the center of the anchor channel to the upper end of the bracket.
11. **Length of Concrete Member, L_s :**
Length of concrete members. This applies to narrow sections (e.g. beams, columns) only.
13. **Width of Bracket, W_b :**
Specified width of bracket.
14. **Resultant Force Distance, c_x :**
Horizontal distance from edge of bracket to resultant force.
15. **Bolt Spacing, S_b :**
Distance from center to center of bolt.

Loads

17. **Building Code with Year:**
Provide the Building Code used for the design and analysis of the project.
18. **Cracking at Service Loads:**
Specify if analysis indicates cracking of concrete at service load levels. If unknown, cracked concrete will be assumed.
19. **Service Dead Load, DL :**
Unfactored dead load. Loads will be factored based on Load and Resistance Factor Design (LRFD also known as Strength Design), unless noted otherwise.
20. **Dead Load Distance, d_{DL} :**
Horizontal distance from the slab edge to the resultant dead load.

25. **Service Earthquake Load, EL :**
Unfactored earthquake load. Loads will be factored based on Load and Resistance Factor Design (LRFD also known as Strength Design), unless noted otherwise.
26. **Earthquake Load Distance, d_{EL1} :**
Horizontal distance from the slab edge to the resultant earthquake load.
27. **Earthquake Load Distance, d_{EL2} :**
Vertical distance from the slab to the resultant earthquake load.

21. & 23. **Service Wind Load, WL :**
Maximum and minimum unfactored wind loads. Loads will be factored based on Load and Resistance Factor Design (LRFD also known as Strength Design), unless noted otherwise.
22. & 24. **Wind Load Distance, d_{WL} :**
Horizontal distance from the center plane of the anchor channel to the resultant wind load. If load acts below the reference axis, use negative distance.

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