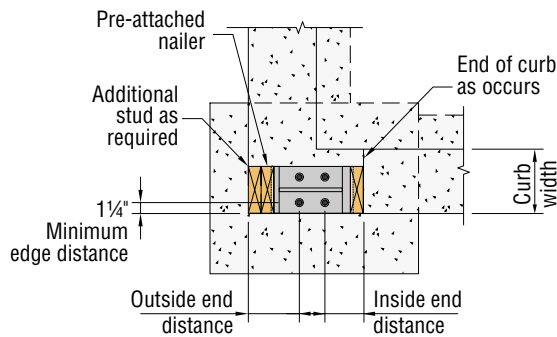
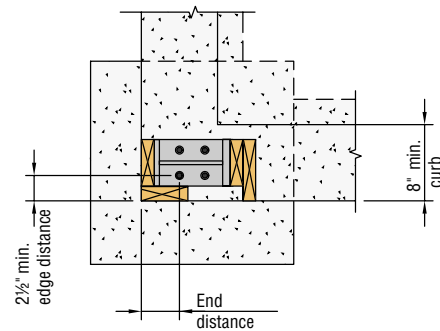


Shear-Anchorage Selection Procedure

General Shear Anchorage		
Step 1	Select anchorage assembly type	Select which anchorage assembly you want to use: <ul style="list-style-type: none"> • The OMFSL anchorage assembly is easier to install and allows the frame to be installed flush with the edge of concrete, but may require additional end distance. • The OMFAB anchorage assembly offers higher shear capacities without increasing concrete strength or end distance, but requires an increased edge distance and additional tie or hairpin reinforcement.
Step 2	Select anchorage design method	Determine which method to use for selecting anchorage solutions: <ul style="list-style-type: none"> • Simplified – This is the quickest and easiest method, requiring only the column size and frame height to select the anchorage. This method can result in a conservative design for some frames and loading conditions. The Simplified method is not applicable for seismic designs that use $R = 3.5$. • Detailed – This method uses column reactions and anchorage assembly capacities to select a solution. The maximum column reactions tabulated in the allowable load tables may be used, or for further economy, the reactions calculated for the project-specific design loads can be used (see footnotes 4 and 5 of the allowable load tables on pages 23–37).
Step 3	Determine shear reactions	Determine the maximum shear reaction for shear anchorage design: <ul style="list-style-type: none"> • For Simplified anchorage design, no calculation of reactions is required. Solutions presented in Table 2.1 (page 41) and Table 3.1 (page 44) consider maximum shear reaction for each group of frames. • For Detailed anchorage design, use maximum column shear reaction tabulated in the allowable load table for the frame selected, or shear reaction calculated using footnote 4 of the allowable load tables on pages 23–37. For OMFSL, determine shear reaction at both tension and compression columns. For OMFAB, only the shear reaction at the compression column is required.
OMFSL Shear Anchorage		
Step 4	Determine inside and outside end distance	Determine the minimum inside and outside end distance in concrete: <ul style="list-style-type: none"> • For Simplified anchorage design, determine directly from Table 2.1 on page 41. • For Detailed anchorage design, use the shear reactions from Step 3 and the OMFSL shear capacities in Table 2.2 or 2.3. Select an inside end distance with a capacity that exceeds the tension column shear reaction, and an outside end distance with a capacity that exceeds the compression column shear reaction.
Step 5	Determine anchorage assembly strength	If high strength anchorage is required for tension, specify a high strength OMFSL anchorage assembly. Otherwise, standard strength anchorage assemblies are adequate for OMFSL except for shaded regions of the anchorage tables.
Step 6	Verify Strong Frame dimensions	If additional studs are required for end distances, check that modified OMF dimensions will accommodate the required wall opening: <ul style="list-style-type: none"> • If inside end distance exceeds that corresponding to the pre-installed nailer installed flush with inside end of curb, subtract the thickness of additional studs required at each column from the clear-opening width, $W1$, and check that this still exceeds the required opening width. • If outside end distance exceeds that corresponding to the pre-installed nailer installed flush with outside end of curb, add the thickness of additional studs required at each column to the outside frame width, $W2$, and check that this still fits within the available wall space.
OMFAB Shear Anchorage		
Step 4	Determine reinforcement	Determine the minimum concrete reinforcement required: <ul style="list-style-type: none"> • For Simplified anchorage design, determine directly from Table 3.1 on page 44. • For Detailed anchorage design, use the compression column shear reaction from Step 3 and the OMFAB shear capacities in Table 3.2 on page 44 to select tie or hairpin reinforcement with a capacity that exceeds the shear reaction.
Step 5	Determine anchorage assembly strength	If high strength anchorage is required for tension, specify a high strength OMFAB anchorage assembly. Otherwise, standard strength anchorage assemblies are adequate for OMFAB except for shaded regions of the anchorage tables.



Plan View – Stemwall/Curb (OMFSL)



Plan View – Curb/Stemwall (OMFAB)