

## TECHNICAL REFERENCE

# Standard Construction Details

Structural and architectural section drawings  
for the Girder-Slab® D-Beam® system

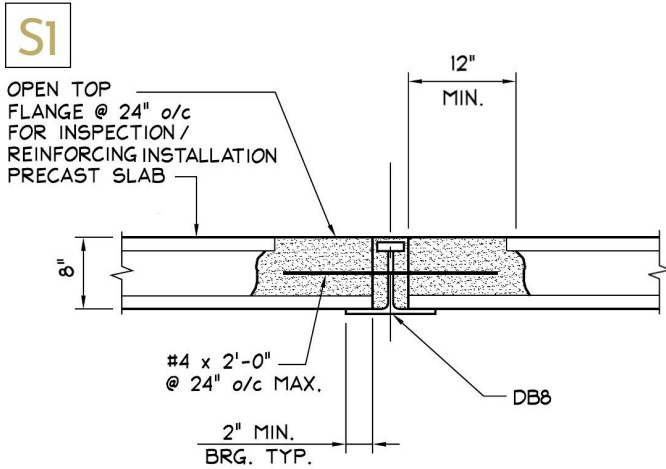
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| <b>S3</b> — Reinforced core with 2" concrete topping     | <b>S4</b> — Alternate slab bearing               |
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| <b>A2</b> — Rated spray fireproofing                     | <b>A3</b> — Drywall soffit / partition enclosure |
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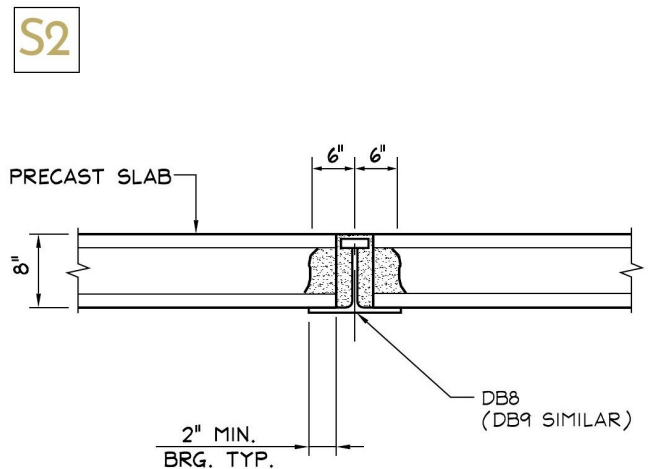
Details are for reference only and must be adapted by the engineer of record to project-specific conditions. All structural design must be performed and stamped by a licensed professional engineer. CS3 provides free engineering consultation throughout design — contact via girder-slab.com.

23 // TYPICAL SYSTEM DETAILS //

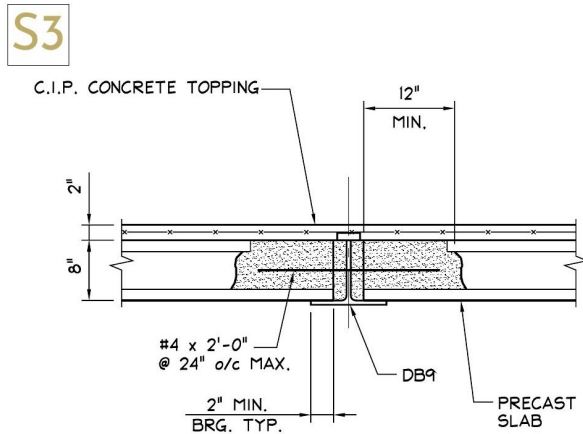
STRUCTURAL SECTIONS



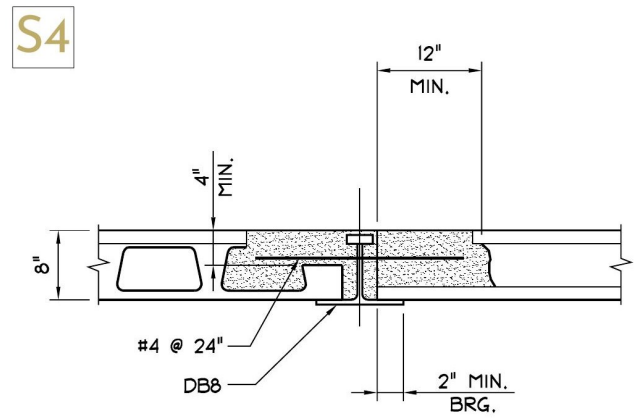
**TYPICAL GIRDER-SLAB® SYSTEM SECTION @ REINFORCED CORE**  
NOTE: VERIFY REINFORCING FOR ACTUAL LATERAL LOADS



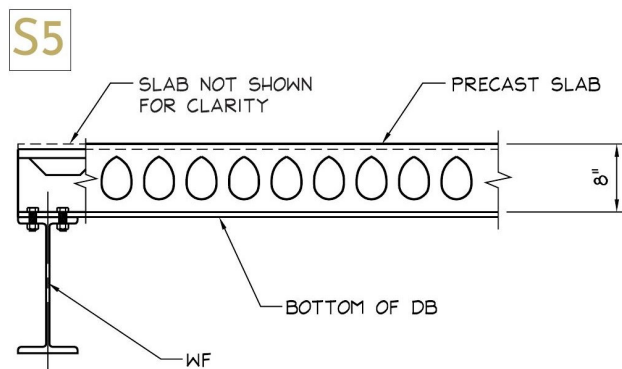
**TYPICAL GIRDER-SLAB® SYSTEM SECTION @ NON-REINFORCED CORE**  
NOTE: DB9 TOP FLANGE WILL BE ABOVE THE SLAB AND WITHIN DEPTH OF TOPPING



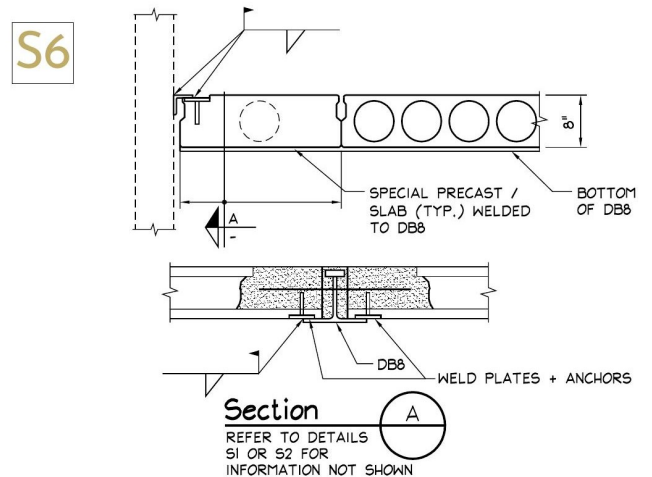
**TYPICAL SECTION: REINFORCED CORE WITH 2" CONCRETE TOPPING**  
NOTE: GROUT TO ATTAIN 4,000 PSI PRIOR TO TOPPING  
(DETAILS S4, S5 & S6 ARE SIMILAR FOR DB9)



**TYPICAL SECTION: 8" GIRDER-SLAB® SYSTEM ALTERNATE SLAB BEARING**  
NOTE: DB9 TOP FLANGE WILL BE ABOVE THE SLAB AND WITHIN DEPTH OF TOPPING  
STABILIZE BEAMS AND SLABS UNTIL ALL GROUTING AND WELDING IS COMPLETE



**TYPICAL SECTION: 8" GIRDER-SLAB® SYSTEM BEARING ON WF BEAM**  
REVIEW UNBRACED LENGTH OF BEAM & CHECK WEB FOR SHEAR REINFORCEMENT

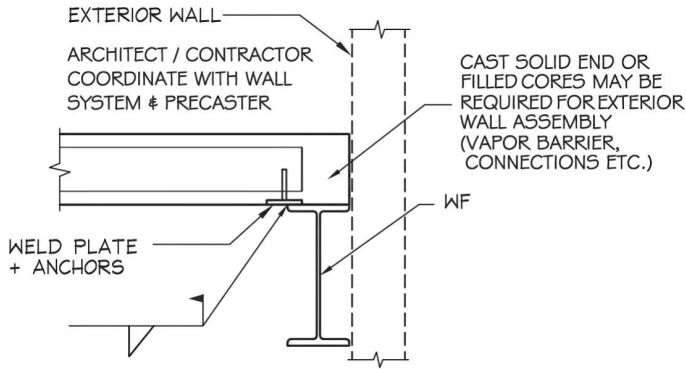


**TYPICAL SECTION: 8" GIRDER-SLAB® SYSTEM WITHOUT WF SPANDREL BEAM**  
TO BE USED WHEN NO SPANDREL BEAM AND SLAB DIAPHRAGM SPAN ≥ 30'-0"  
SPECIAL PLANK ACTING AS DIAPHRAGM CHORD

# STRUCTURAL SECTIONS

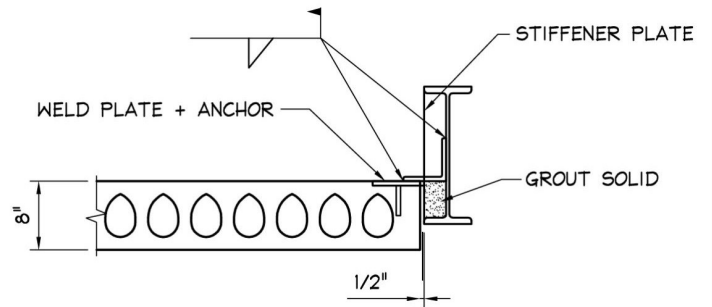
// TYPICAL SYSTEM DETAILS // 24

S7



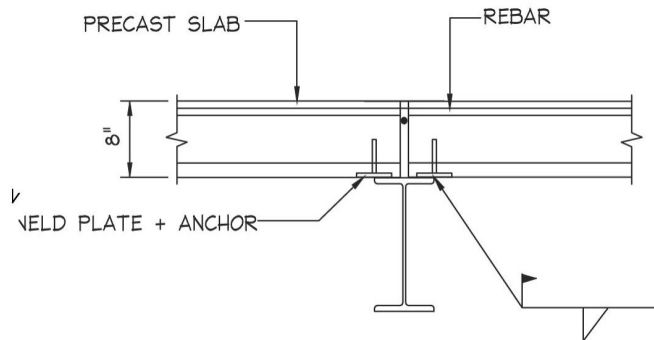
TYPICAL SECTION: 8" PRECAST SLAB END BEARING ON WF SPANDREL BEAM  
STABILIZE BEAMS & SLABS UNTIL ALL GROUTING AND WELDING IS COMPLETE

S8



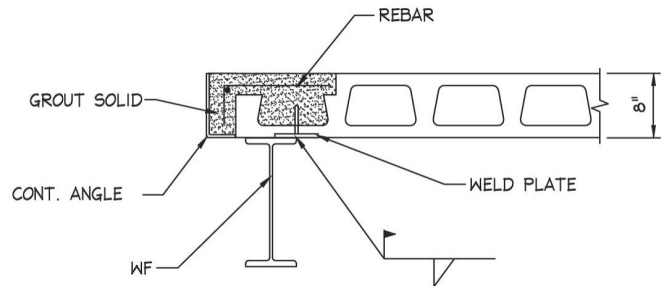
TYPICAL SECTION: 8" PRECAST SLAB UPSET LONGITUDINAL SPANDREL BEAM

S9



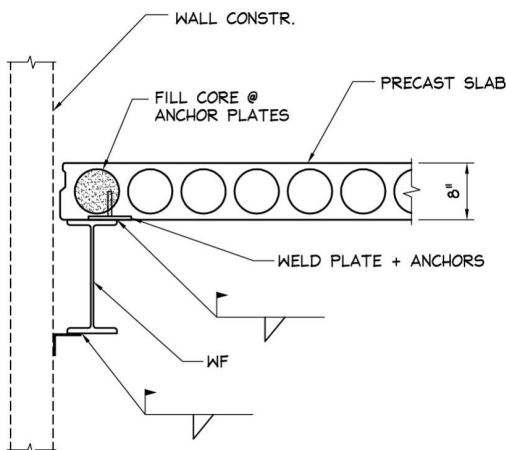
TYPICAL SECTION: 8" PRECAST SLAB END BEARING ON WF INTERIOR BEAM  
STABILIZE BEAMS AND SLABS UNTIL ALL GROUTING AND WELDING IS COMPLETE

S10



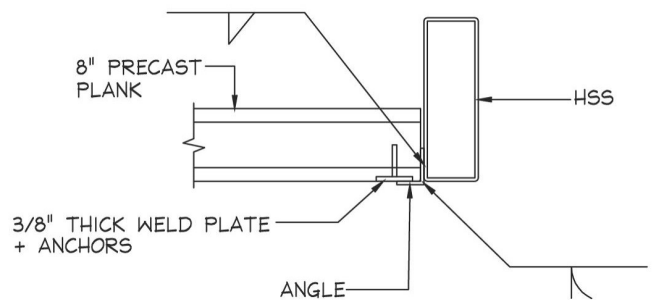
TYPICAL SECTION: 8" PRECAST SLAB AT ELEVATOR DOOR SILL

S11



TYPICAL SECTION: 8" PRECAST SLAB LONGITUDINAL BEARING ON WF SPANDREL BEAM

S12

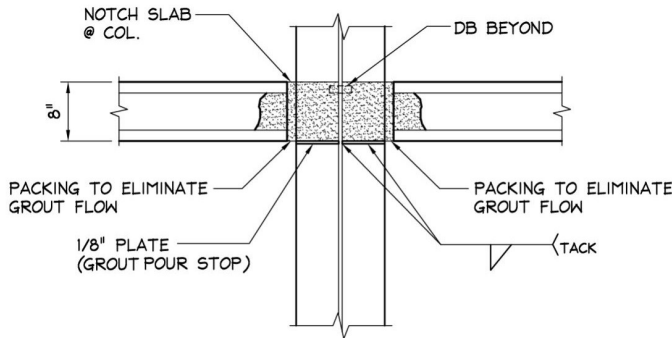


PRECAST SLAB SUPPORT DETAIL

25 // TYPICAL SYSTEM DETAILS //

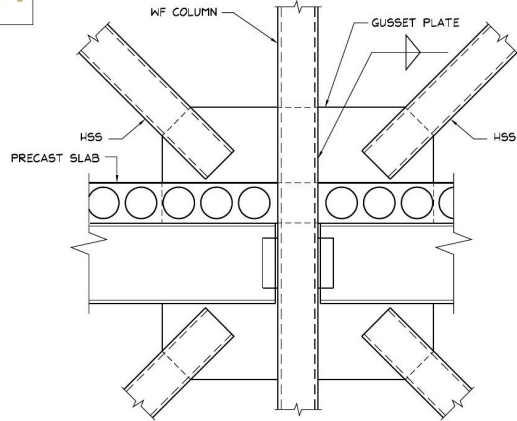
**STRUCTURAL SECTIONS**

**S13**



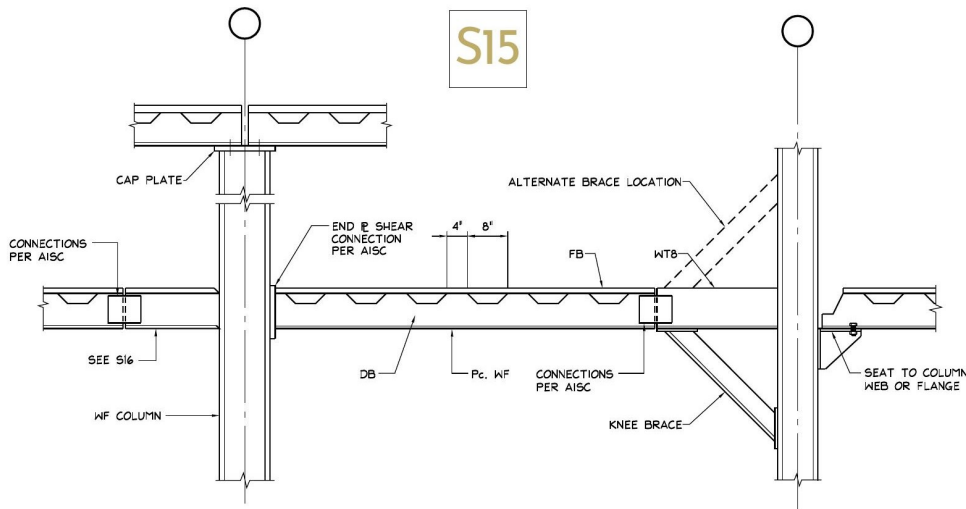
TYPICAL SECTION THRU WF COLUMN AT GROUT POUR STOP

**S14**



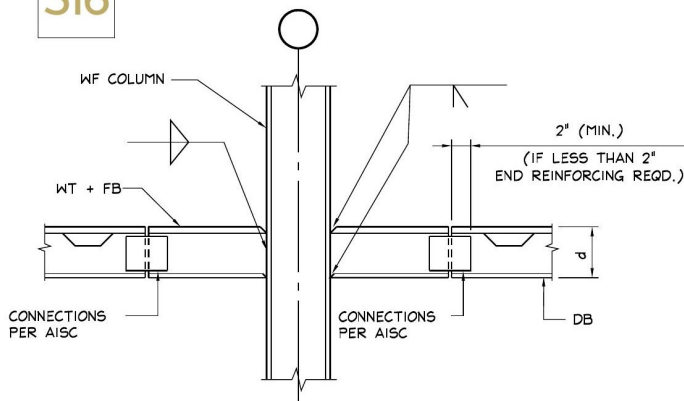
TYPICAL BRACE CONNECTION CLEAR OF PLANK

**S15**



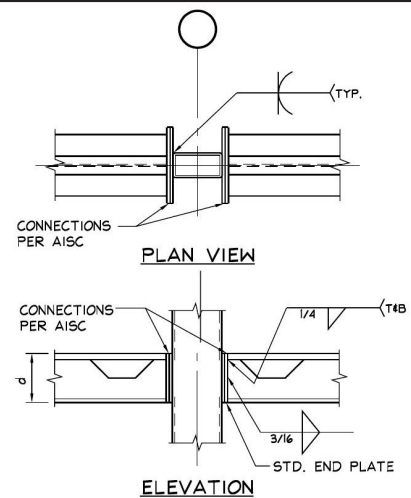
EXAMPLES OF D-BEAM® GIRDER CONNECTIONS TO WF COLUMNS  
NOTE: CHECK WEBSITE FAQs ON CONNECTION DESIGN

**S16**



TYPICAL "TREE" COLUMN ELEVATION  
NOTE: STABILIZE BEAMS AND SLAB UNTIL ALL GROUTING & WELDING IS COMPLETE

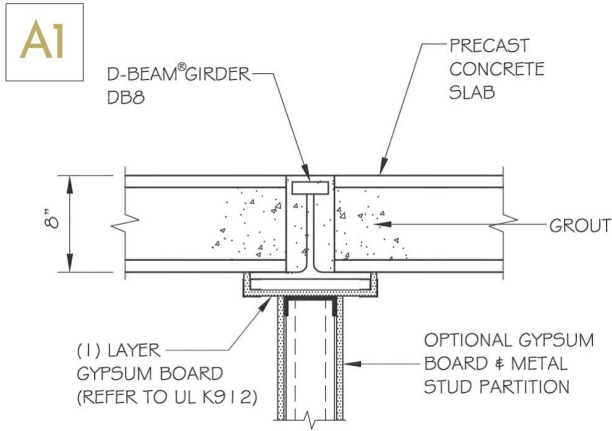
**S17**



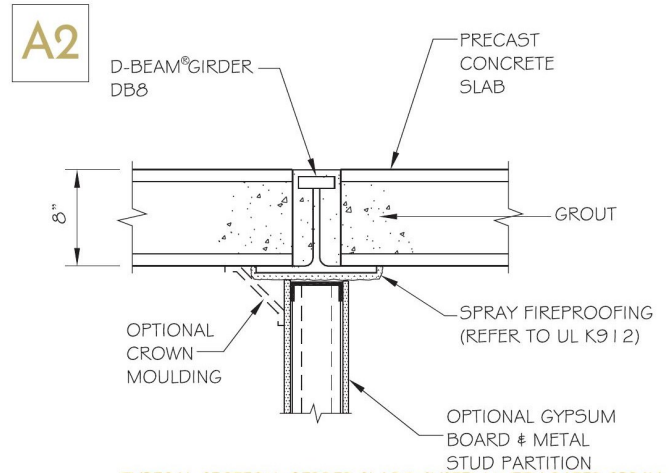
TYPICAL PLAN/ELEVATION: 8" D-BEAM® GIRDER CONNECTION TO HSS COLUMN  
USED AT EXPOSED COLUMNS WITH CONCEALED CONNECTIONS  
MUST NOTE TO STABILIZE ALL D-BEAM® GIRDERS  
MODIFY WITH BOLTS "OUTSIDE" OF D-BEAM® GIRDER FOR NORMAL CONNECTION

# ARCHITECTURAL SECTIONS

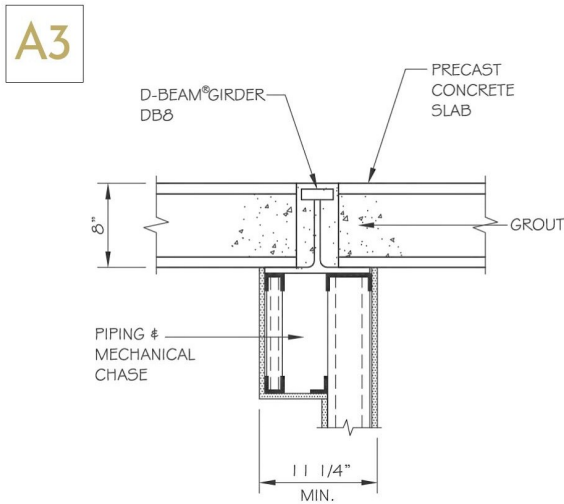
// TYPICAL SYSTEM DETAILS // 26



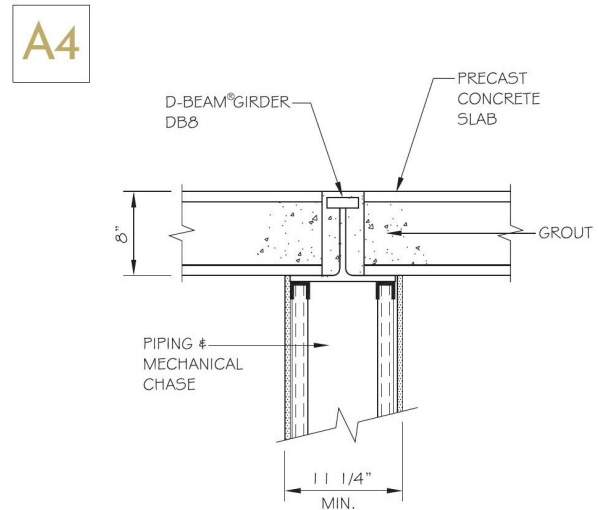
**TYPICAL SECTION: GIRDER-SLAB® SYSTEM WITH RATED DRYWALL SOFFIT ENCLOSURE**  
(OPTIONAL DRYWALL PARTITION) DETAILS ARE SIMILAR FOR DB9 WITH 2" CONCRETE TOPPING



**TYPICAL SECTION: GIRDER-SLAB® SYSTEM WITH RATED SPRAY FIREPROOFING**  
(OPTIONAL DRYWALL PARTITION) DETAILS ARE SIMILAR FOR DB9 WITH 2" CONCRETE TOPPING



**TYPICAL SECTION: GIRDER-SLAB® SYSTEM WITH DRYWALL SOFFIT / PARTITION ENCLOSURE**  
DETAILS ARE SIMILAR FOR DB9 WITH 2" CONCRETE TOPPING



**TYPICAL SECTION: GIRDER-SLAB® SYSTEM WITH DRYWALL CHASE PARTITION ENCLOSURE**  
DETAILS ARE SIMILAR FOR DB9 WITH 2" CONCRETE TOPPING

THE PARTITION AND RATED PROTECTION DETAILS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND NOT INTENDED FOR ACTUAL USE. GIRDER-SLAB TECHNOLOGIES, LLC IS NOT RESPONSIBLE FOR DESIGN, MEANS, OR METHODS ASSOCIATED WITH THIS DETAIL.



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