

Specifications

Auditorium and Fixed Seating Flooring and Anchor Systems

January, 2012



General Requirements

- Flooring and anchors must withstand the tension, shear, and load values. Maximum loads exerted by KI products are shown in Figures I thru 14.
- All floor anchors must be installed to the anchor manufacturers' specifications.
- It is the responsibility of the person or persons having authority over site conditions to ensure the flooring type and condition can withstand the applied loads.

Warranty and Liability

KI does not warrant product damage resulting from improper installation on less than adequate flooring. KI is not responsible for personal injury or site damage resulting from improper installation on inadequate flooring.

Anchoring Guidelines - Concrete Floors

Guidelines for anchoring auditorium and fixed seating to a concrete floor vary with the type of anchor and quality of the floor. A qualified anchor manufacturer should be consulted on all installations.

- For floor-mounted units: concrete must have at least a 3000 PSI compressive strength with normal weight aggregate and be at least 3" thick with a minimum of 1-1/2" of obstruction-free depth.
- For riser-mounted units: concrete must be at least 4" thick with a minimum of 2-1/2" of obstruction-free depth.
- Anchors must be embedded a minimum of 1-1/2" for floor-mounted units and a minimum of 2-1/2" for riser-mounted units, dependent on concrete strength.
- A qualified anchor manufacturer should be consulted on all non-standard installations.
- On-site anchor pull tests should be conducted according to the anchor manufacturer's procedures when the floor does not meet the above minimum and/or non-KI-supplied anchors are used.
- Anchors and floor must withstand the load values KI supplies in figures I thru 11.

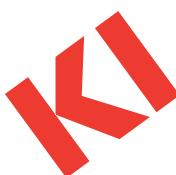
Anchoring Guidelines - Wood Floors

- Wood floors must be a minimum of 2 layers of 3/4" APA graded plywood.
- Fasteners must be embedded a minimum of 1-1/2".
- On-site pull tests should be conducted when the floor does not meet the above requirements or non-KI-supplied fasteners are used.
- Fasteners and floor must withstand the load values KI supplies in figures I thru 11.

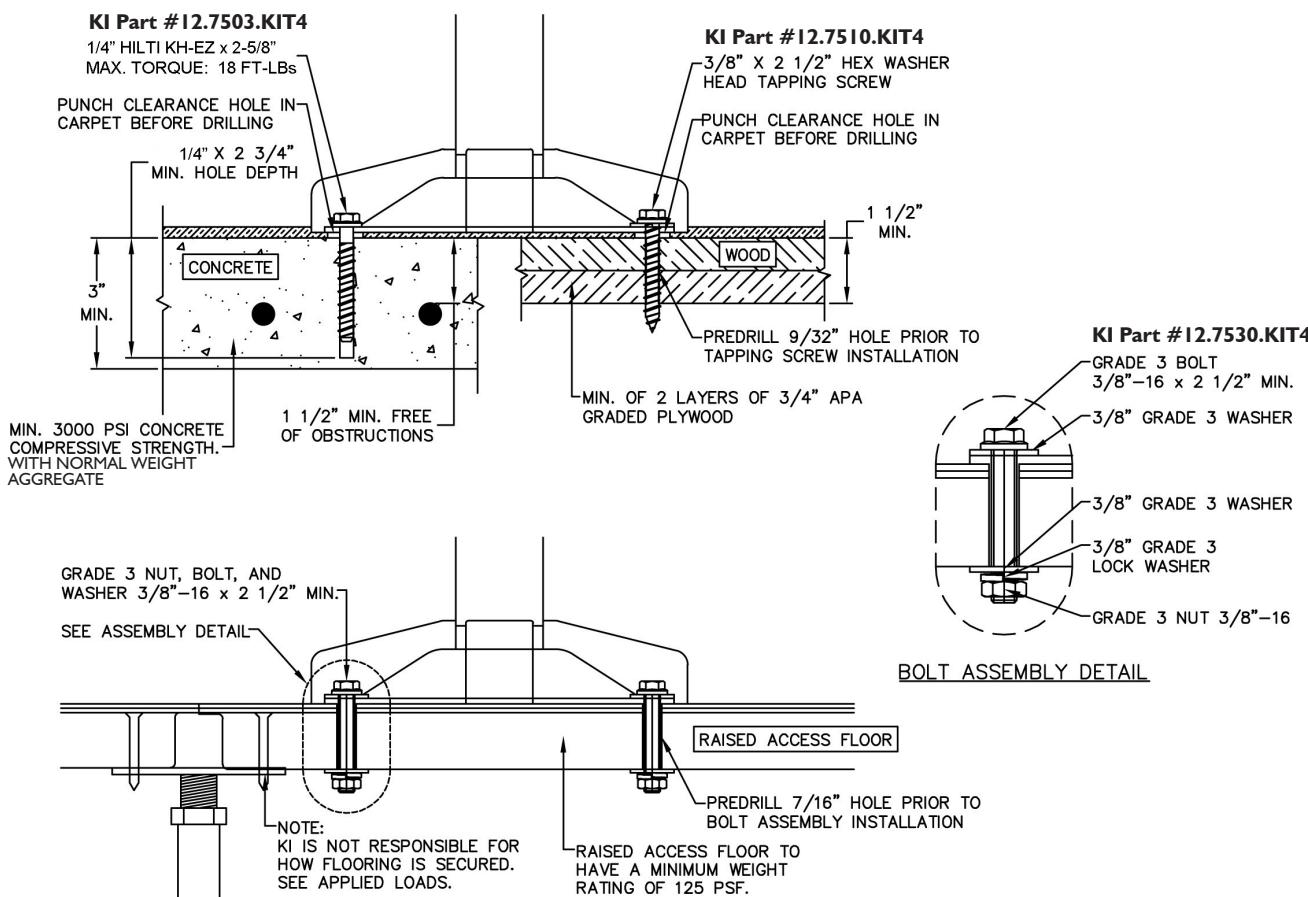
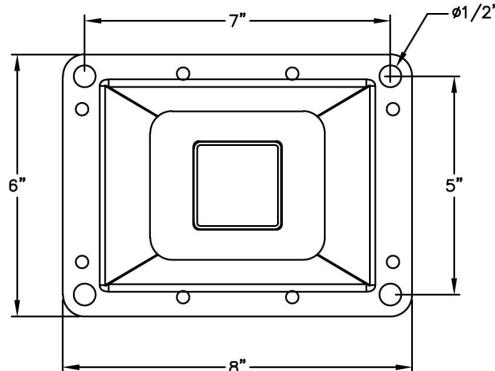
Anchoring Guidelines - Raised-Access Flooring

- Raised-access panel floors must have a minimum rating of 125 PSF.
- KI products must be installed with a grade 3 or better 3/8" diameter bolt, washers, and nuts through the floor.
- Floor panels must be fastened down to withstand the load values KI supplies in figures I thru 11.

NOTE: If any other flooring types exist that are not shown, please provide the detailed floor specifications to your KI contact. Please reference "Product Installation Guidelines, Fixed Seating, Non-Typical Floor Conditions", document (KI-62258).



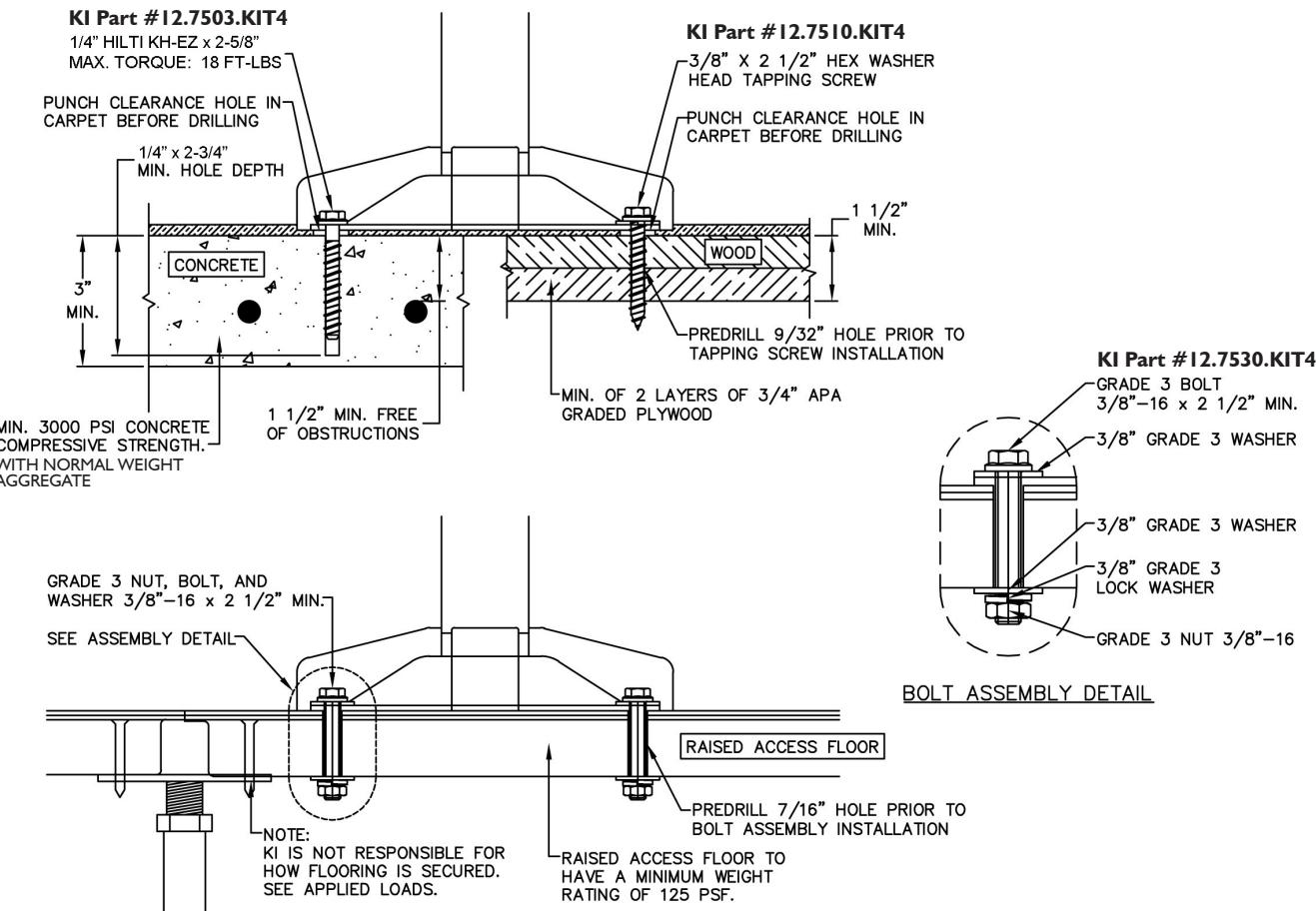
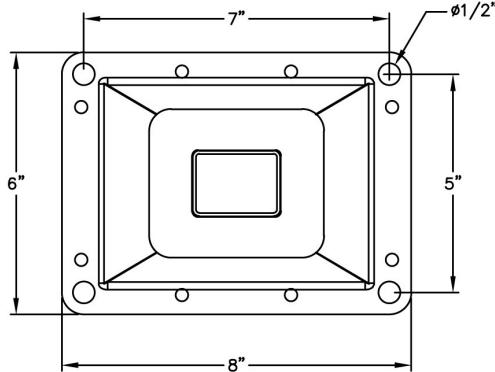
Jury Base Seating - Basic - Figure 1



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
1200	240
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
5200	

NOTE:
IF ANY OTHER FLOORING TYPES EXIST THAT ARE
NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
WITH THE DETAILED FLOOR SPECIFICATIONS.

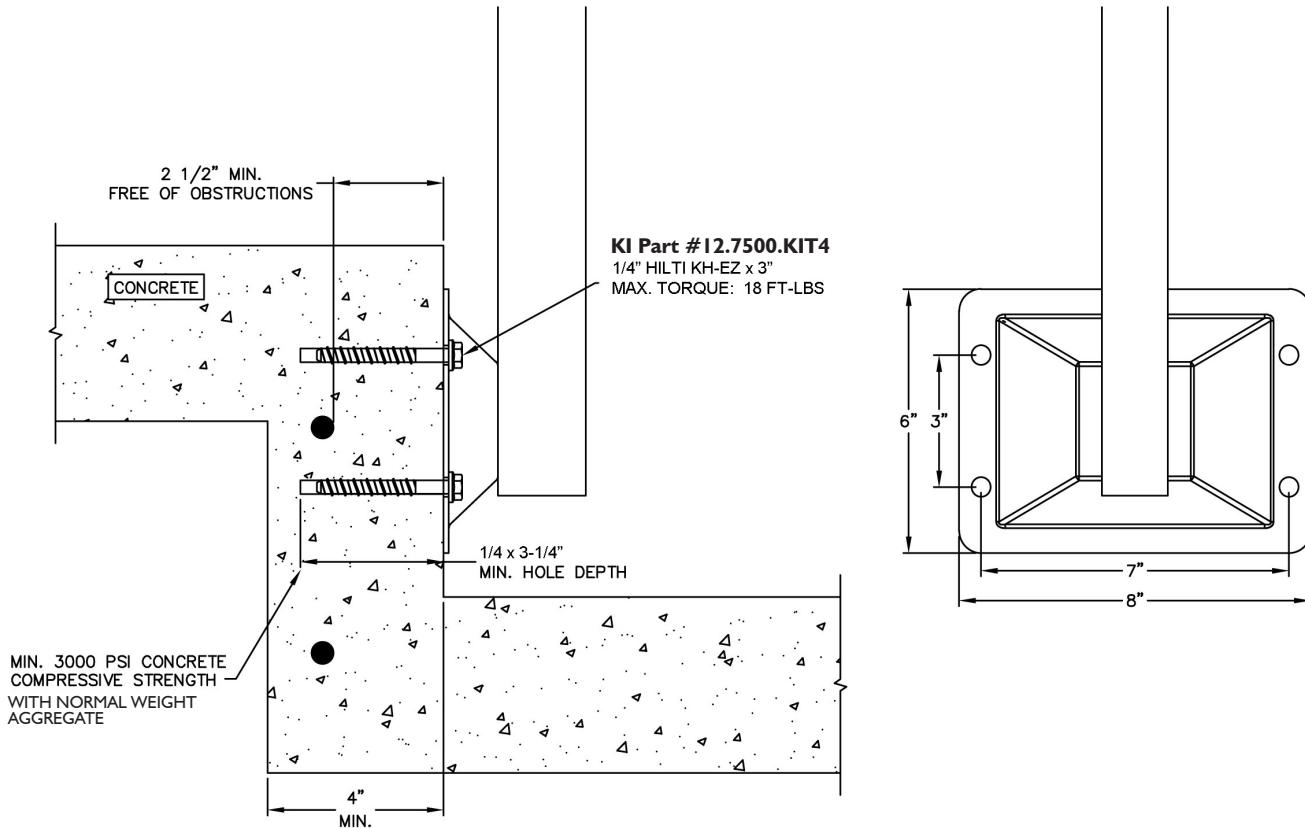
Single Pedestal Seating - Basic - Figure 2



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	240
1200	
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
5200	

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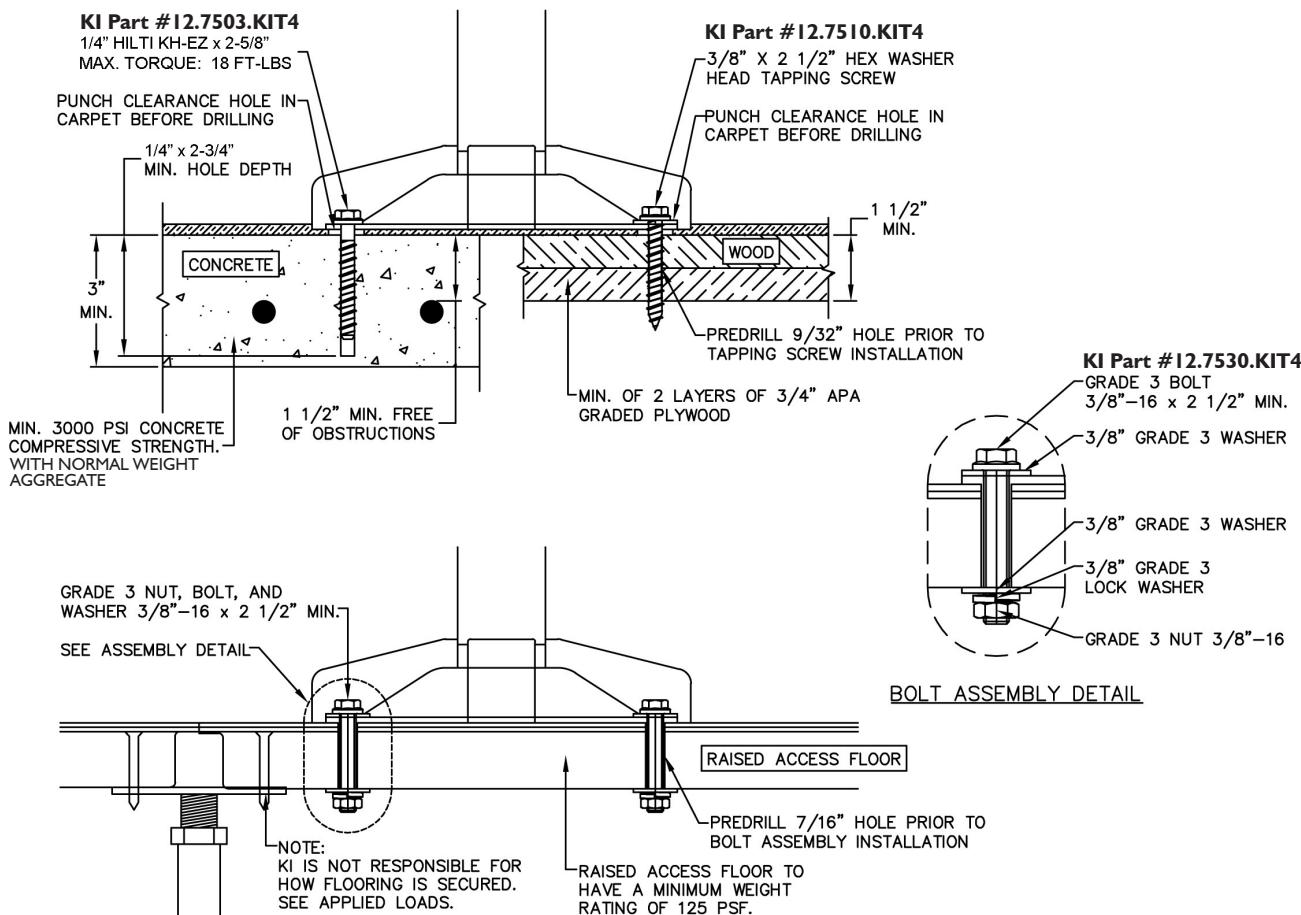
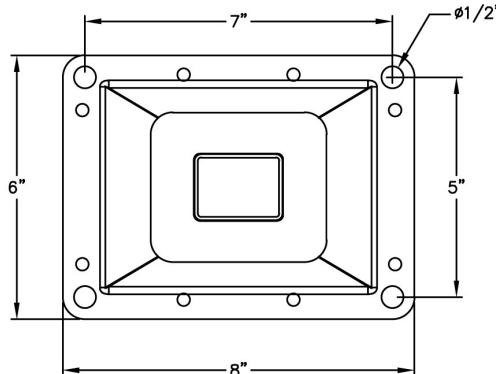
Single Pedestal Seating - Riser Mount - Figure 3



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHED (LBS)
1290	300
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
4150	

NOTE:
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NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
WITH THE DETAILED FLOOR SPECIFICATIONS.

Sequence Seating - Basic - Figure 4



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHED (LBS)
3600	720
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
15,600	

NOTE:
IF ANY OTHER FLOORING TYPES EXIST THAT ARE NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT WITH THE DETAILED FLOOR SPECIFICATIONS.

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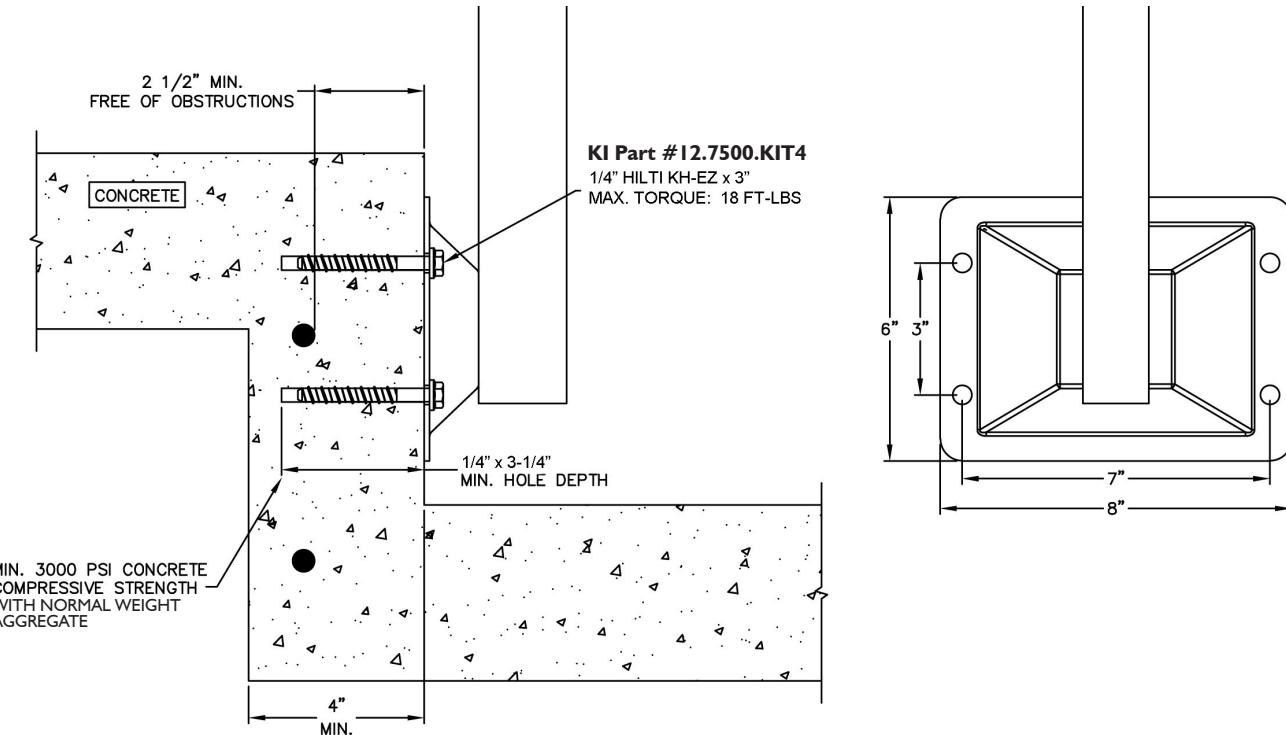
Specifications

Auditorium and Fixed Seating

Flooring and Anchor Systems

January, 2012

Sequence Seating - Riser Mount- Figure 5



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
4050	900

ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD
13,410

NOTE:
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NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
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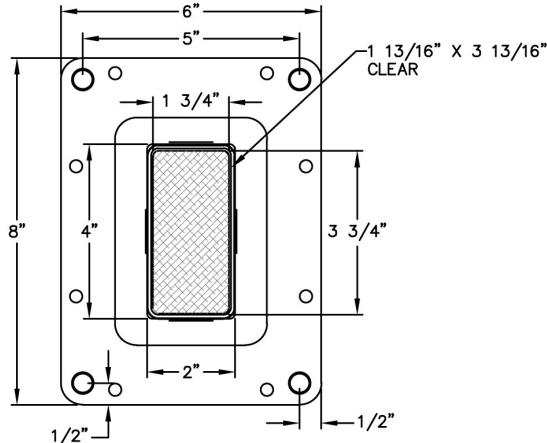
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Specifications

Auditorium and Fixed Seating Flooring and Anchor Systems

January, 2012

Seminar Table - Basic - Figure 6



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1/4" HILTI KH-EZ x 2-5/8"
MAX. TORQUE: 18 FT-LBS

PUNCH CLEARANCE HOLE
CARPET BEFORE DRILLING

KI Part #12.7510.KIT4

-3/8" X 2 1/2" HEX WASHER
HEAD TAPPING SCREW

MIN. 3000 PSI CONCRETE
COMPRESSIVE STRENGTH.—
WITH NORMAL WEIGHT
AGGREGATE

MIN. OF 2 LAYERS OF 3/4" APA
GRADED PLYWOOD

MIN. 3000 PSI CONCRETE
COMPRESSIVE STRENGTH.
WITH NORMAL WEIGHT
AGGREGATE

**GRADE 3 NUT, BOLT, AND
WASHER 3/8"-16 x 2 1/2"**

SEE ASSEMBLY DET.

RAISED ACCESS FLOOR

BOLT ASSEMBLY DETAIL

NOTE:
KI IS NOT RESPONSIBLE FOR
HOW FLOORING IS SECURED.
SEE APPLIED LOADS.

-RAISED ACCESS FLOOR TO HAVE A MINIMUM WEIGHT RATING OF 125 PSF.

APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR

<u>TENSION (LBS)</u>	<u>SHEAR (LBS)</u>
1080	240

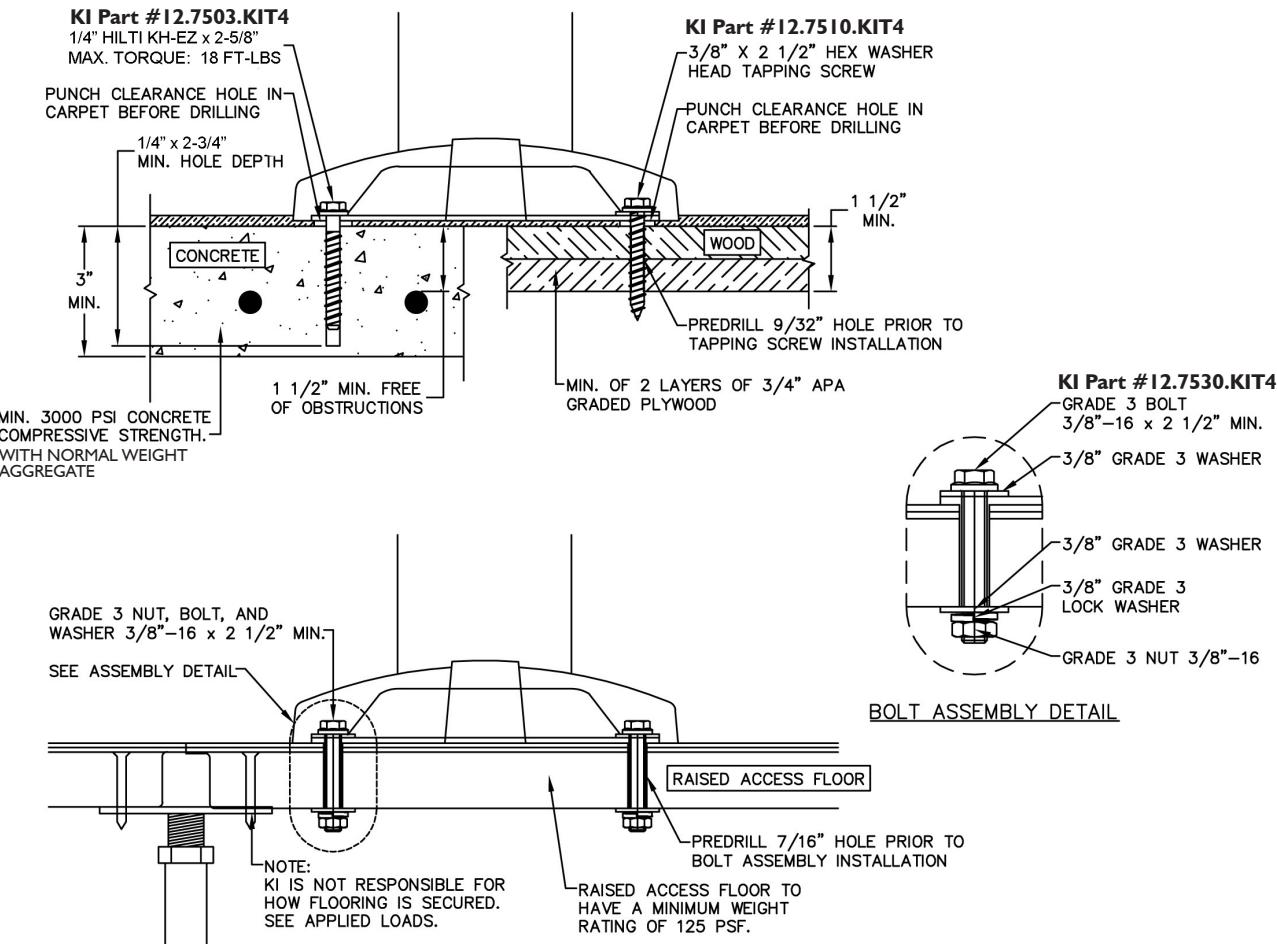
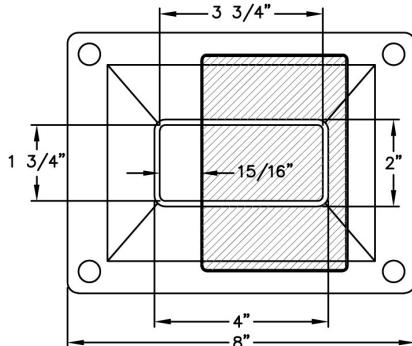
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD

4650

NOTE:
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NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
WITH THE DETAILED FLOOR SPECIFICATIONS.

10

University Seating - Basic - Figure 7

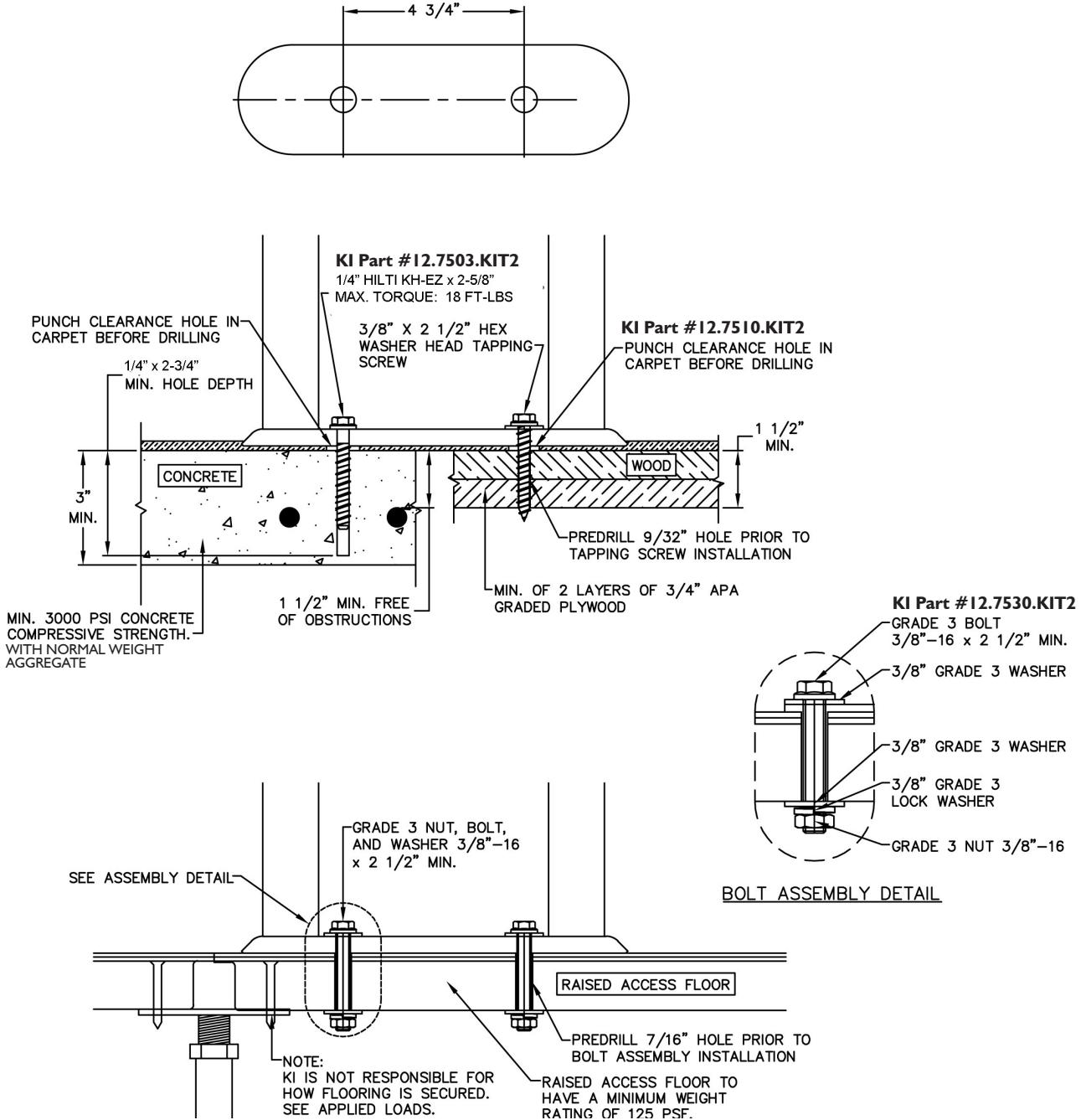


APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHED (LBS)
3510	240
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
15.830	

NOTE:
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Concerto Seating - Basic - Figure 8



APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
2550	450
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
5180	

NOTE:
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NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
WITH THE DETAILED FLOOR SPECIFICATIONS.

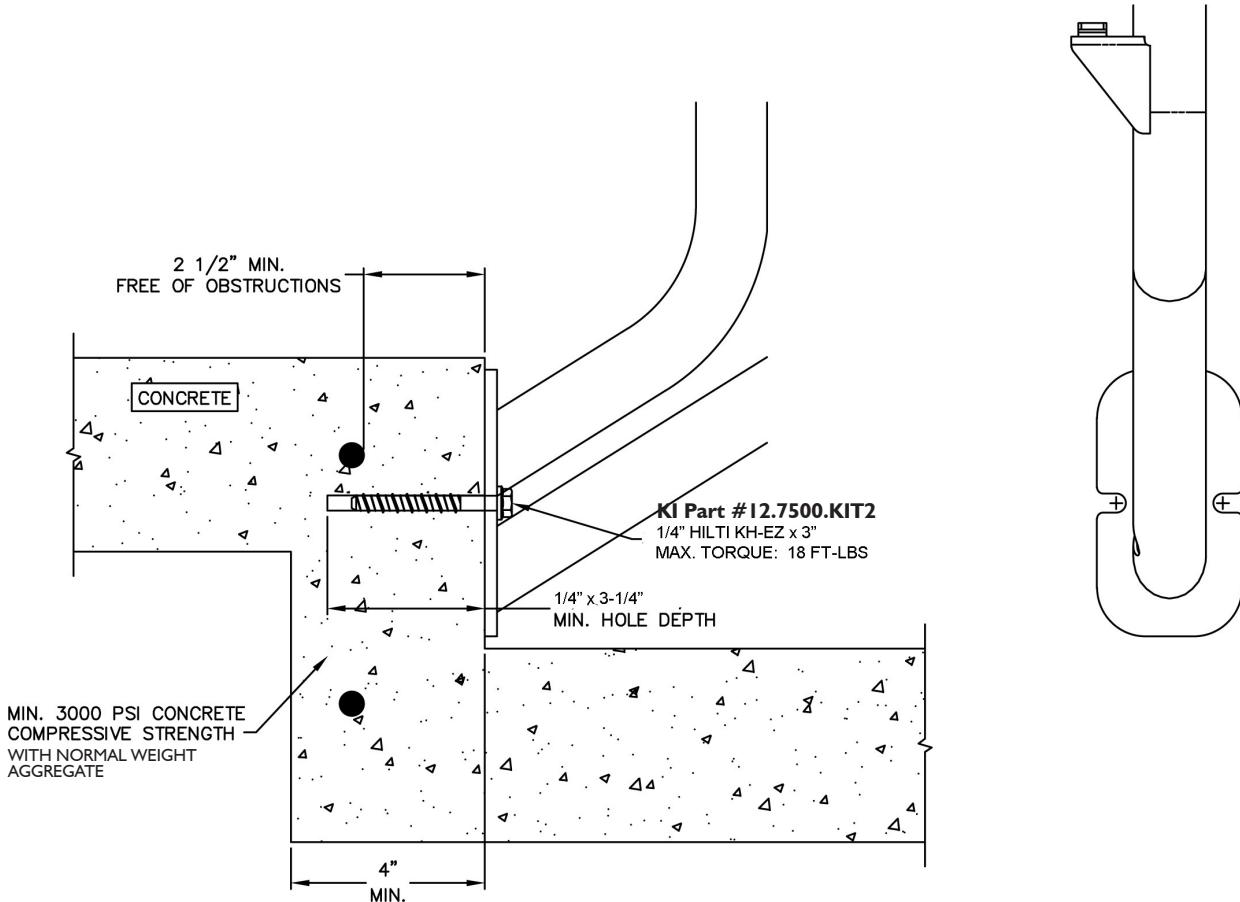
Specifications

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Flooring and Anchor Systems

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Concerto Seating - Riser Mount - Figure 9

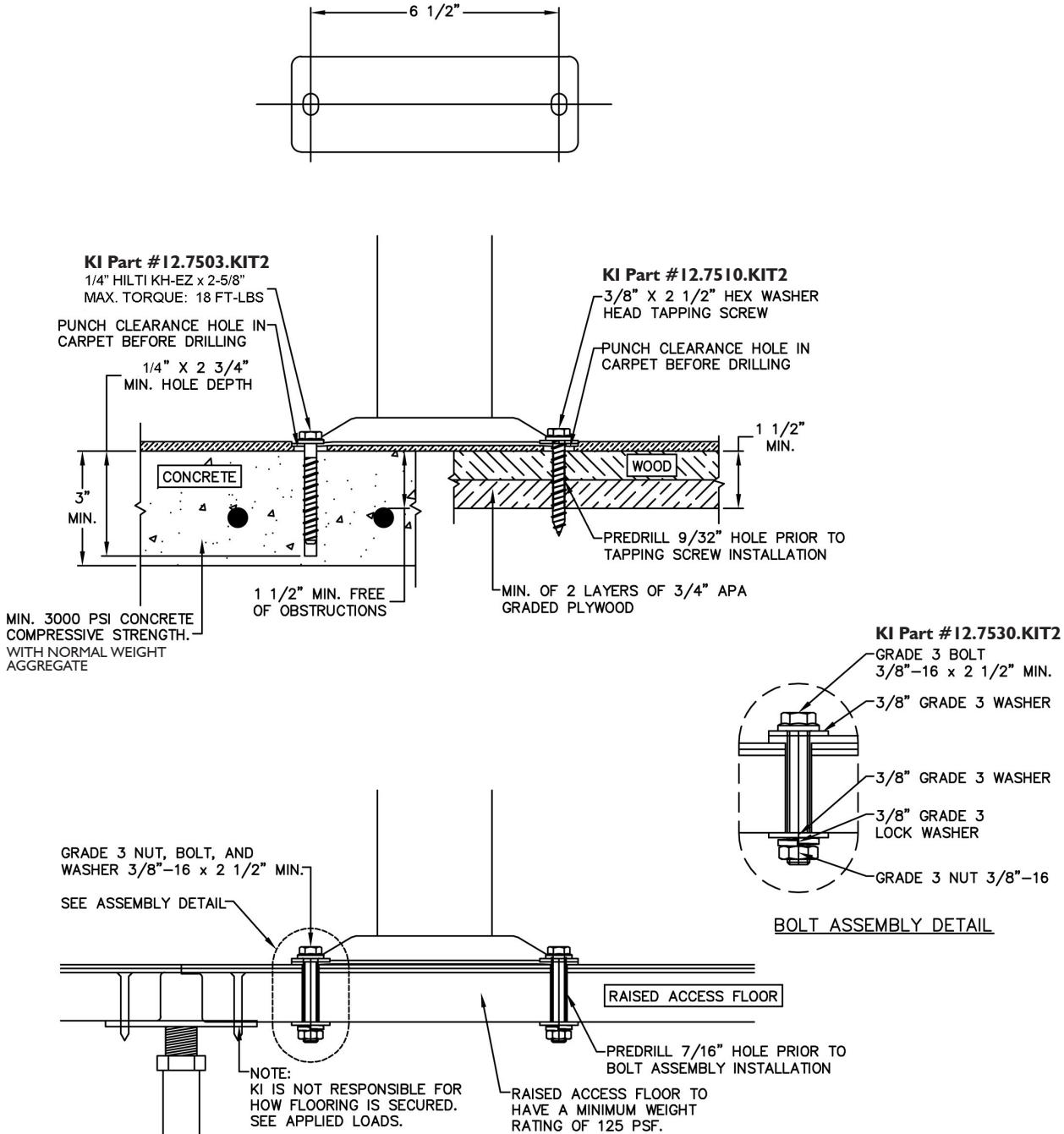


APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
5160	660
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
8470	

NOTE:
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Lancaster Seating - Basic - Figure 10

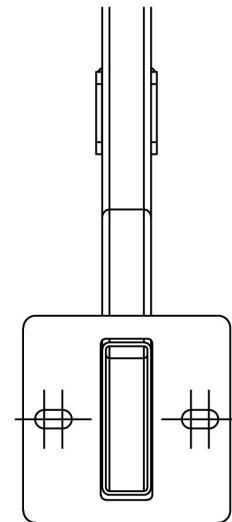
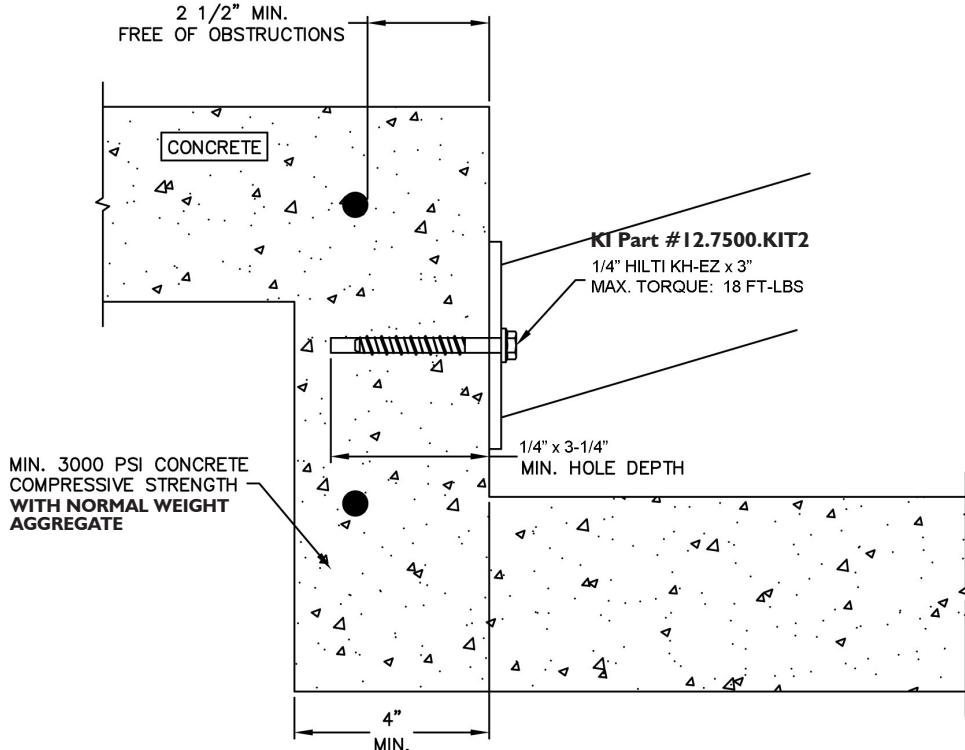


APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
2610	450
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
5650	

NOTE:
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Lancaster Seating - Riser Mount - Figure 11

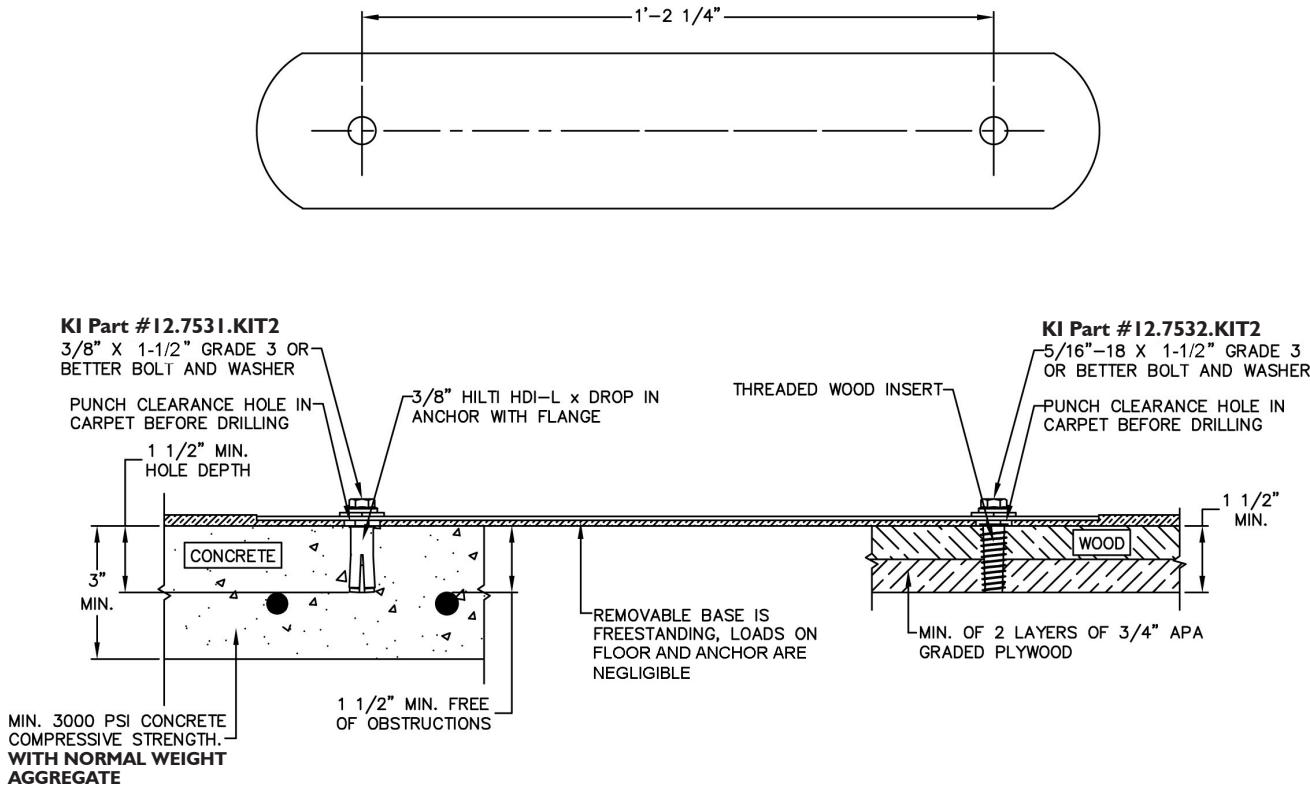


APPLIED LOAD PER ANCHOR WITH A THREE TIME SAFETY FACTOR	
TENSION (LBS)	SHEAR (LBS)
1890	220
ACTUAL CALCULATED MOMENT AT BASE (IN-LBS) WITH 325 LB LOAD	
8400	

NOTE:
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NOT SHOWN, PLEASE PROVIDE YOUR KI CONTACT
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Removable Base for Concerto and Lancaster - Figure 12



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