

NO.	REVISION	BY	CH	SUP	APPROVED	DATE

**NOTE**  
 ALL DIMENSIONS ARE IN INCHES.  
 DIMENSIONS SHOWN (X.XX) ARE REFERENCE DIMENSIONS. FOR FINAL CONTROLLING DIMENSIONS SEE THIS DRAWING SHEET #2 DETAIL "A" AND SECTION "A-A" AND DRAWING SE131-003

5-1/2  
 TAPER GROUNDWRAP FROM 1/8" TO 3/8" THICK OVER THIS LENGTH AT THIS LOCATION TYP TOP & BOTTOM

(3.98)  
 IN 3/8 THICK INSULATED AREA ONLY

#8-32 UNC  $\nabla$  1  
 2 HOLES  
 SP AS SHOWN  
 DO NOT DRILL INTO COPPER.  
 VERIFY LOCATION PRIOR TO DRILLING.  
 MOUNT BOX AND SECURE WITH #8-32 SCREWS

**RELEASED FOR FABRICATION / INSTALLATION**  
 PPPL Drafting:

**NOTE**  
 DRAWING DEPICTS COIL WITH RIGHT LEAD ORIENTATION (SE131-005-01) MADE FROM SE131-035-01

**NOTE**  
 LOCATION OF CENTROID OF COIL MUST BE POSITIONED WITH THE ACCURACY REQUIRED TO MEET THE TOLERANCES DEFINED IN THE FINAL ASSEMBLY DRAWING SE131-003.

TWIST PART #1 (WIRE) STARTING AT THIS LOCATION AND FEED INTO MOUNTED BOX. (WIRES SHOWN FOR CLARITY) WIRES ARE INSTALLED PRIOR TO INSTALLING THE LAST LAYER OF GROUNDWRAPPING.

PART NO.	DRAWING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY	RECD
5	THIS DWG	EPOXY			
4	SE131-069	TF COIL GROUNDWRAP - S2 GLASS .015" THK x 2" WIDE	GLASS TAPE		AVR
3	SE131-035	TF COIL ASSEMBLY (SE131-035-01 & SE131-035-02)	COPPER/INSULATION		I
2	DIAGNOSTIC_LOOP_BOX	4 X 8 X 2 BOX	CARBON STEEL		I
1	DIAGNOSTIC_LOOP_WIRE	ARI INDUSTRIES #032-IN-C	316 SS SHEATH/COND		I

PARTS LIST					
COMPUTER GENERATED DRAWING CHANGES NOT PERMITTED	CENTRAL FILES:	PRINCETON PLASMA PHYSICS LABORATORY			
PRO E	UNLESS OTHERWISE SPECIFIED	PRINCETON UNIVERSITY			
DO NOT VERIFY INFORMATION BY SCALING DRAWING	DIMENSIONS ARE IN INCHES MACHINE SURFACES $\nabla$	NATIONAL COMPACT STELLARATOR EXPERIMENT			
BREAK SHARP EDGES .005/.020	TOLERANCES NON-CUMULATIVE	STELLARATOR CORE CONVENTIONAL COILS			
SCALE 0.250	DECIMAL-INCH FRACTIONS	DSN: J. RUSHINSKI	2/01/06	DRAWING NO:	
NEXT ASSEMBLY	OVER 120° ±.125	CHK: M. KALISH/B. PAUL	2/01/06	SE131-005	
WEIGHT	OVER 120° ±.125	ENGR: M. KALISH	2/01/06	SHEET 1 OF 2	
1192.8 lbs	OVER 120° ±.125	SUPV: J. SIEGEL	2/01/06	REV 0	
MODEL NAME					
SE131-005					

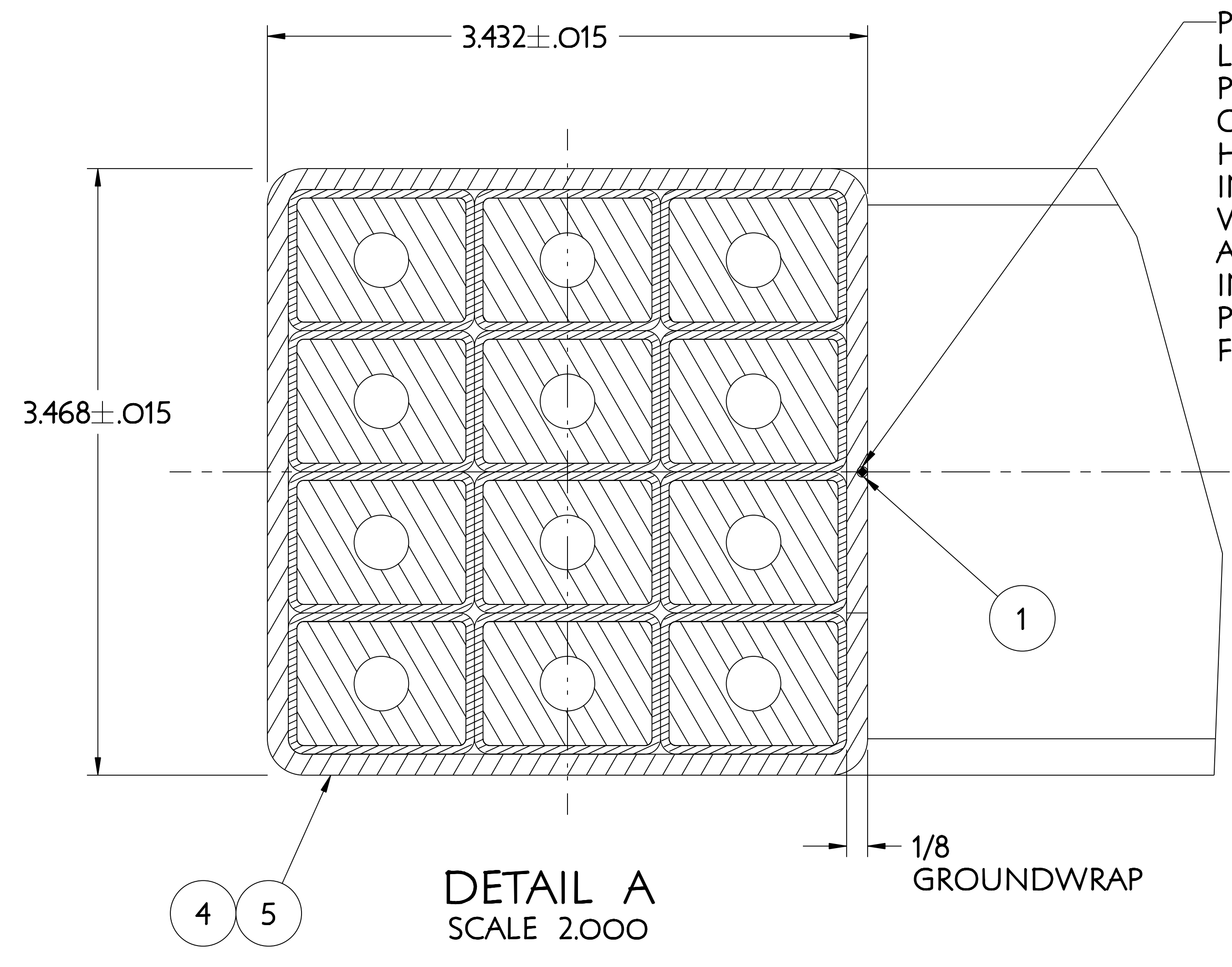
RELEASE LEVEL: Fabrication  
 DWG VERSION NO:

WELDING ENGINEER

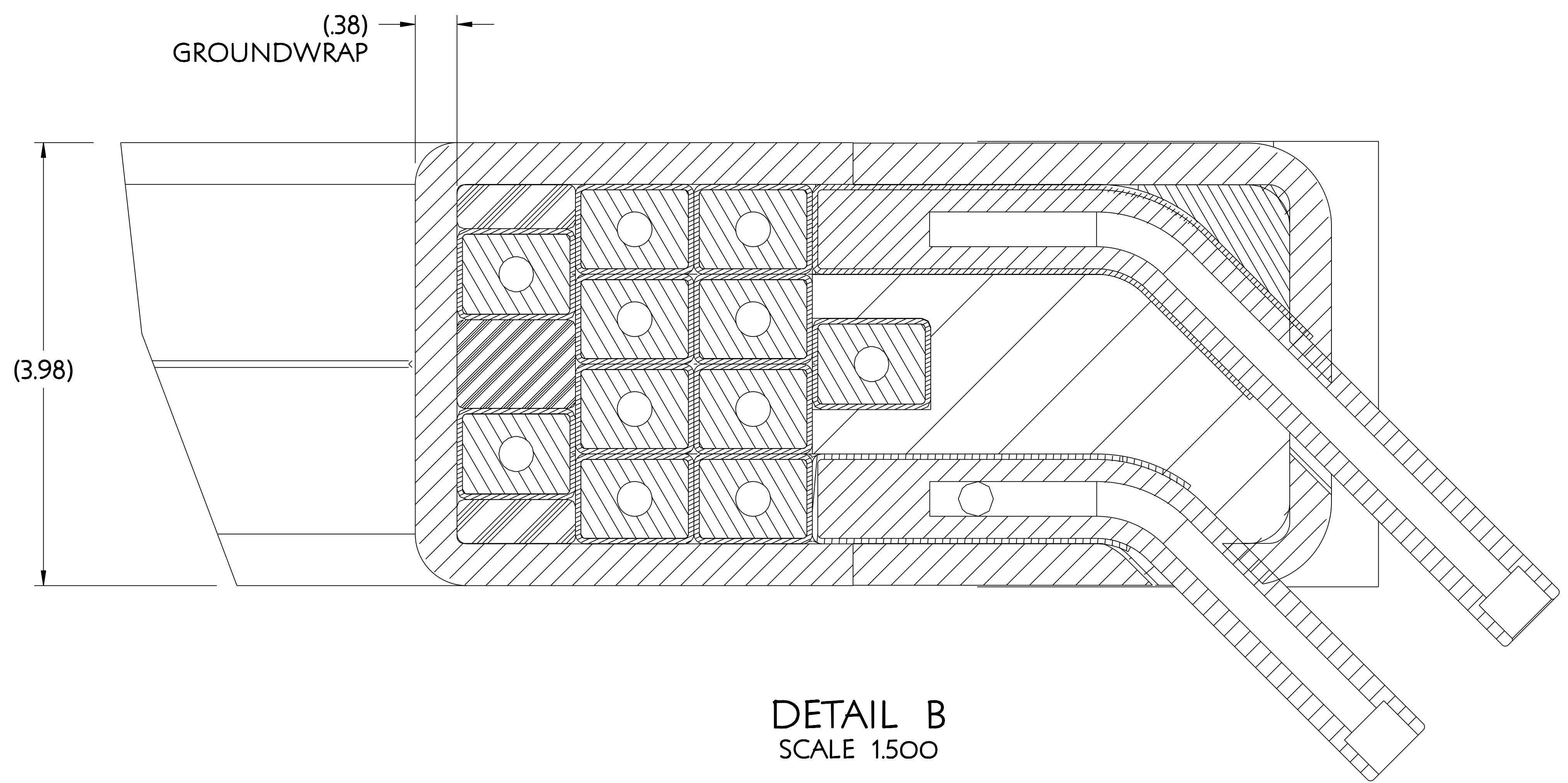
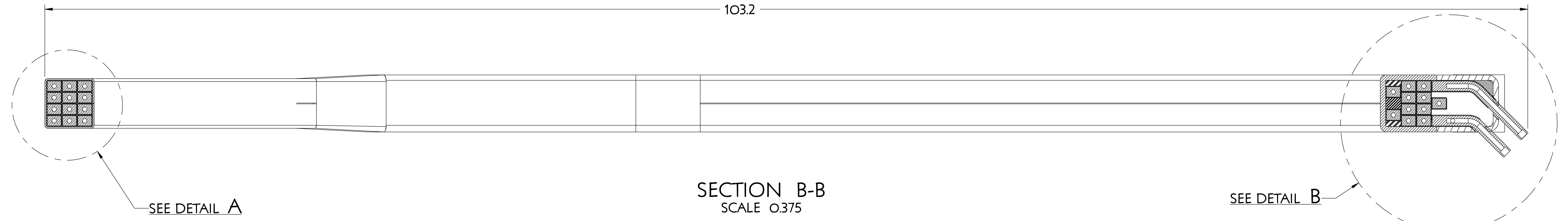
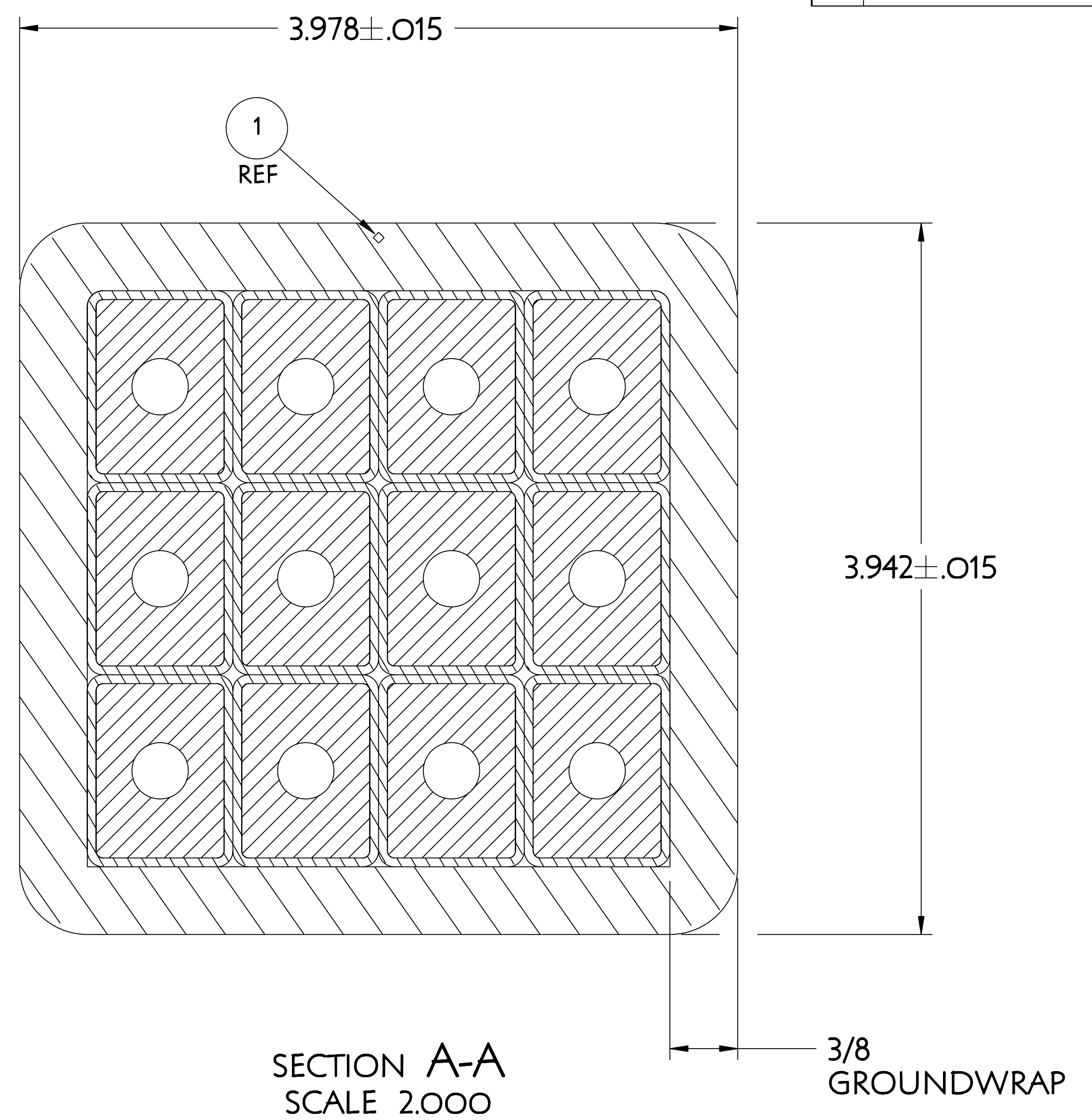
NCSX-SE131-005

NCSX-ASSY-FORMAT.E

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PRIOR TO INSTALLING THE LAST LAYER OF GROUNDWRAP ROUTE PART #1 ABOUT THE PERIPHERY OF COIL ON THE CENTERLINE AND HOLD IN PLACE WITH KAPTON TAPE. INSTALL 1 TURN AND EXIT WHILE TWISTING THE WIRES AT THE COIL LEAD AREA AND INTO THE MOUNTED BOX. PROVIDE 24' (FT) OF EXCESS WIRE FOR FUTURE TERMINATIONS.



**RELEASED FOR FABRICATION / INSTALLATION**  
PPPL Drafting:

**NOTE**  
FOR FINAL VACUUM IMPREGNATION OF COIL SEE SPECIFICATION NCSX-CSPEC-131-01-00 FOR GROUNDWRAP INSULATION AND VPI DETAILS.

**RELEASE LEVEL: Fabrication**  
**DWG VERSION NO: 5**

WEIGHT	1192.8 lbs
MODEL NAME	SE131-005
WELDING ENGINEER	

PART NO.	DRAWING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY	RECD
PARTS LIST					
COMPUTER GENERATED DRAWING DRAWING CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY <b>NATIONAL COMPACT STELLARATOR EXPERIMENT</b>			
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	STELLARATOR CORE CONVENTIONAL COILS TF COIL GROUNDWRAPPED ASSEMBLY			
NEXT ASSEMBLY	TOLERANCES NON-CUMULATIVE DECIMAL-INCH FRACTIONS .XX ±.000 .XXX ±.005 ANGULAR ±.0°-15'	DSN: J. RUSHINSKI CHK: M. KALISH/B. PAUL ENGR: M. KALISH SUPV: J. SIEGEL	2/01/06 2/01/06 2/01/06 2/01/06	DRAWING NO: <b>SE131-005</b> SHEET 2 OF 2 REV 0	

NCSX-SE131-005