

4. LINEAR REINFORCEMENT
- A. 4 TWISTED 100 DENIER STRANDS OF FIBER
  - B. NOMINAL 90 DEGREE STRAND TO STRAND SPACING AS SHOWN
  - C. FINAL STRAND SHAPE AND RADIAL POSITION RELATIVE TO BRAIDED STRANDS MAY VARY FROM THOSE SHOWN IN DRAWING, LINEAR STRANDS CAN INTERWEAVE WITH BRAIDED STRANDS SO LONG AS FIBER TO MATRIX WALL THICKNESSES SHOWN ARE MAINTAINED
5. CUT TUBING TO  $120 \pm 1$  INCH LENGTH

## NOTES:

1. MATERIALS  
MATRIX: ARKEMA PEBAX 3533  
FIBER: DUPONT KEVLAR 29
2. EXTRUDE TUBING OVER NON-METALLIC MANDREL
3. BRAIDED REINFORCEMENT
- A. 8 TWISTED 100 DENIER STRANDS OF FIBER
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## PART NUMBER

-

## REVISIONS

SAND2010-4420P

## ISS

## SHEET ZONE

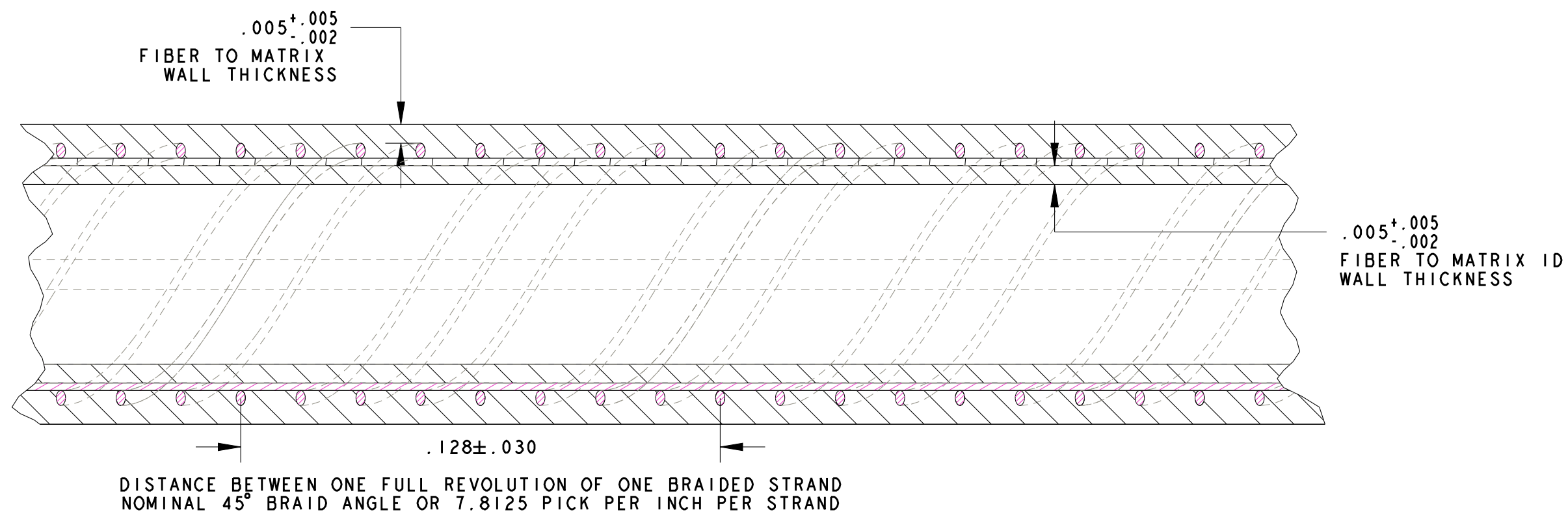
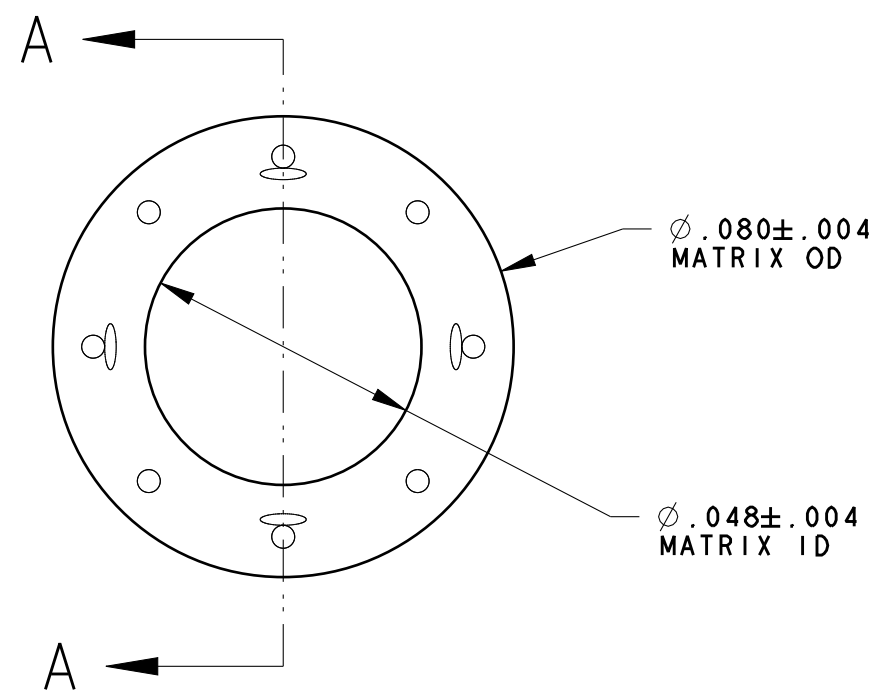
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## DATE

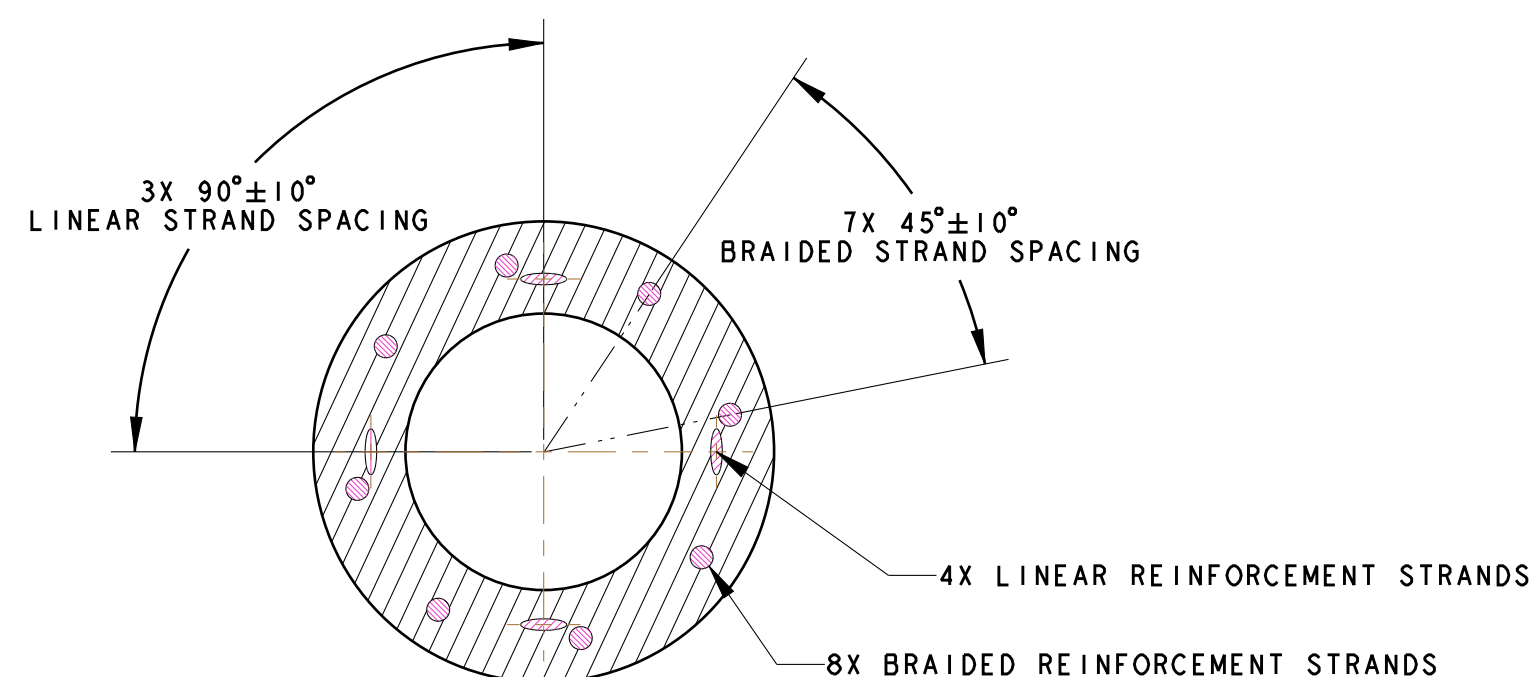
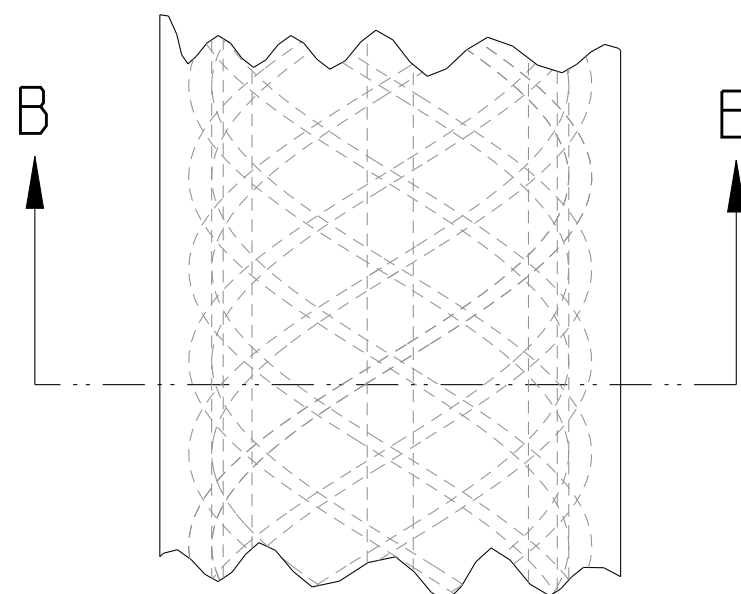
A

ORIGINAL ISSUE

4/22/2010



SECTION A - A



SECTION B - B

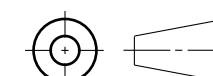
CURRENT ISSUE APPROVALS		DATE
DRAWN:	J. SHELTON 2614	4/22/2010
CHECKED:	J. SHELTON 2614	
DESIGNED:	J. SHELTON 2614	
APPROVED:	R. WILD 2614	

DRAWING: REINFORCED-TUBING-2  
MODEL: REINFORCED-TUBING-2  
TYPE: ASSEM

SANDIA NATIONAL  
LABORATORIES (NM)

ENGLISH

THIRD ANGLE  
PROJECTION



TITLE		DRAWING NUMBER		ISSUE
TUBING, REINFORCED		-		A
4 LINEAR		-		
8 BRAIDED		-		
PART CLASSIFICATION		CAGEC 14213		SCALE 30/1
UNCLASSIFIED		SHEET 1 OF 1		
DRAWING CLASSIFICATION		SA - CHK - 4/22/2010		
UNCLASSIFIED				
ORIGIN PRO/E - WILDFIRE 4				

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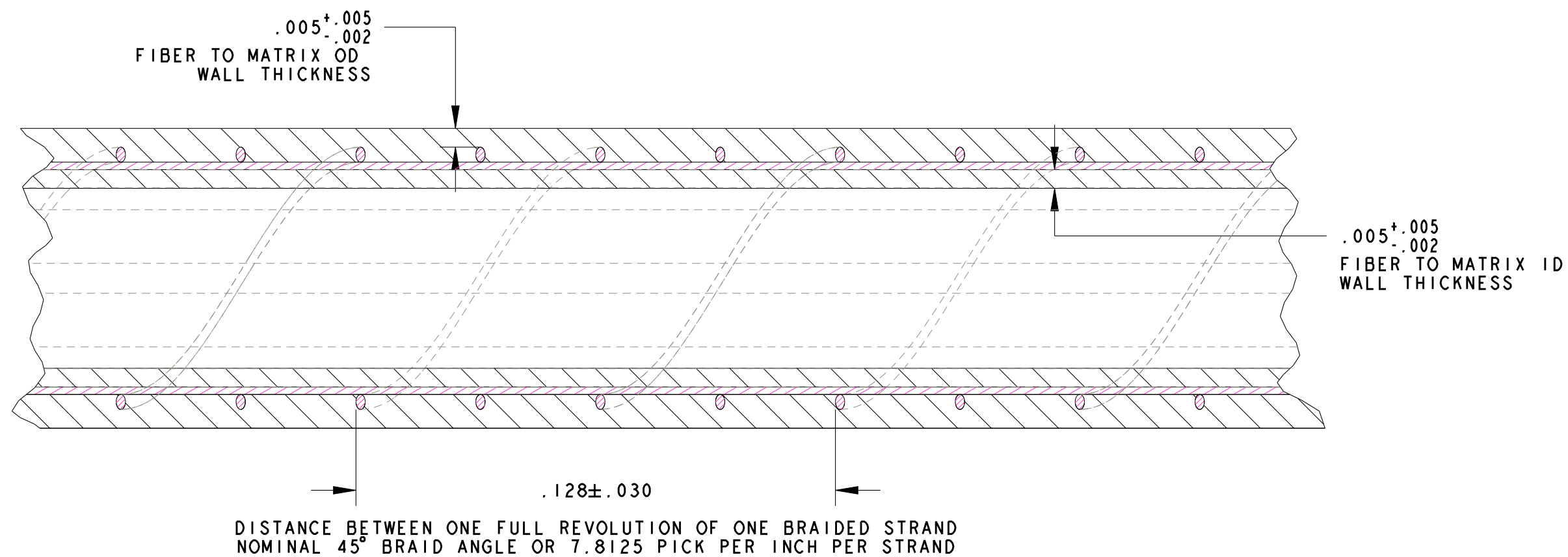
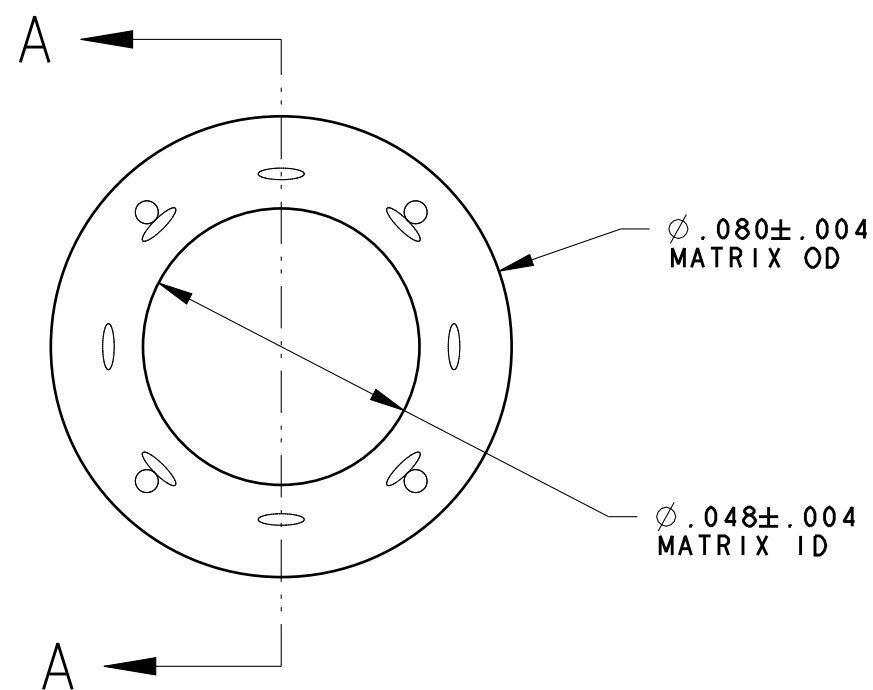
1. MATERIALS  
MATRIX: ARKEMA PEBAX 3533  
FIBER: DUPONT KEVLAR 29
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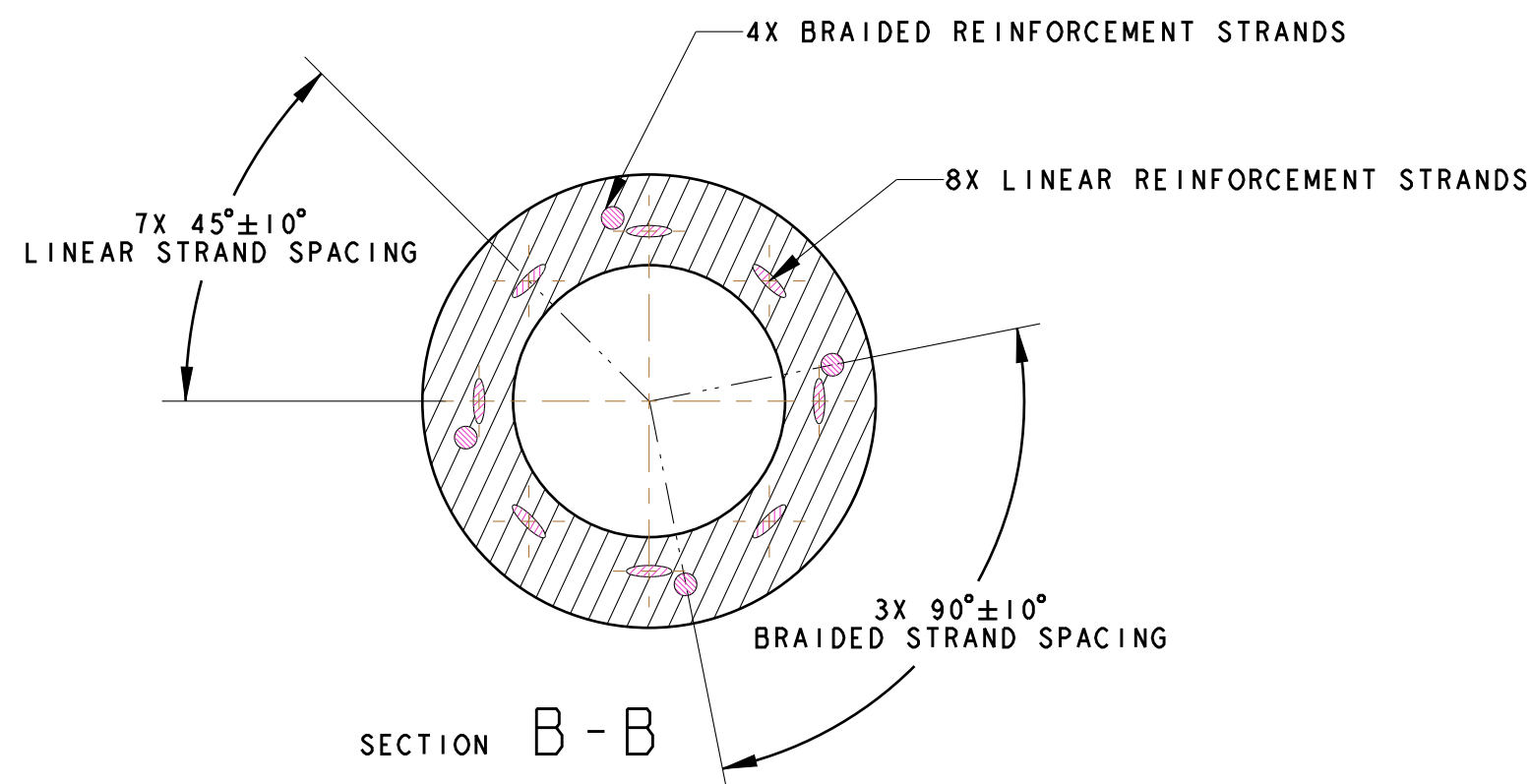
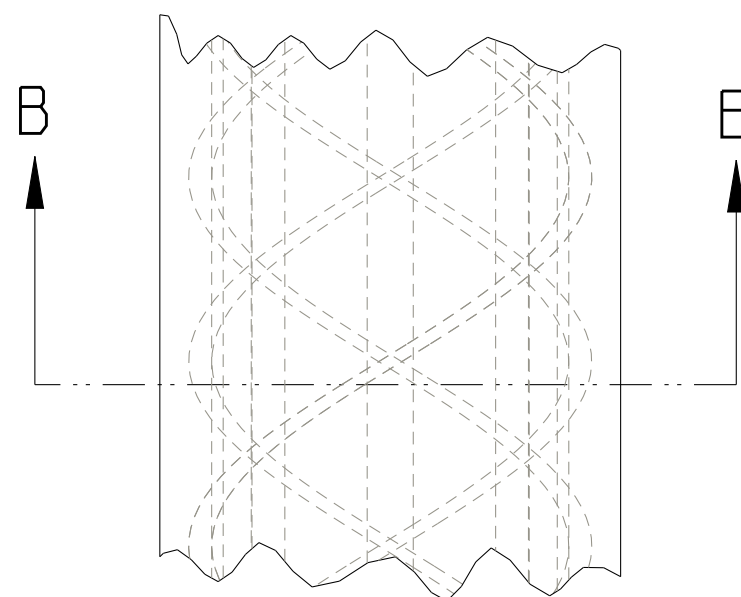
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## REVISIONS

ISS	SHEET ZONE	DESCRIPTION	DATE
A		ORIGINAL ISSUE	4/20/2010



SECTION A - A



SECTION B - B

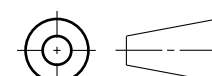
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DRAWING: REINFORCED-TUBING  
MODEL: REINFORCED-TUBING  
TYPE: ASSEM

SANDIA NATIONAL  
LABORATORIES (NM)

ENGLISH

THIRD ANGLE  
PROJECTION



## TITLE

TUBING, REINFORCED

## PART CLASSIFICATION

UNCLASSIFIED

## DRAWING CLASSIFICATION

UNCLASSIFIED

## SIZE

C

## DRAWING NUMBER

-

## ISSUE

A

ORIGIN PRO/E-WILDFIRE 4

STATUS SA-CHK - 4/20/2010

CAGEC 14213

SCALE 30/1

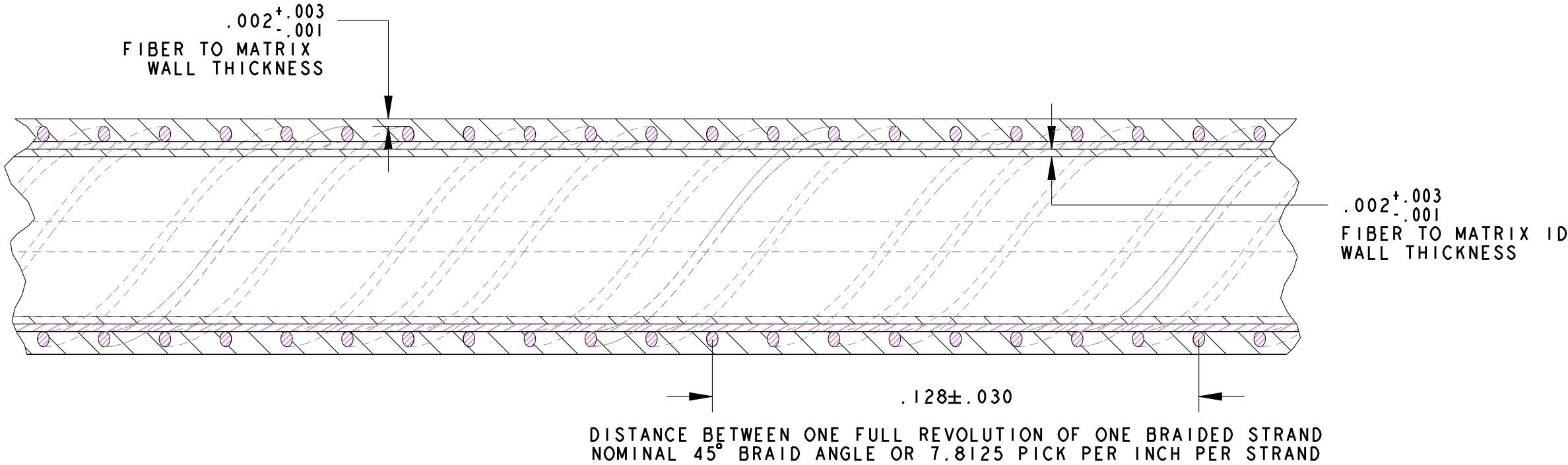
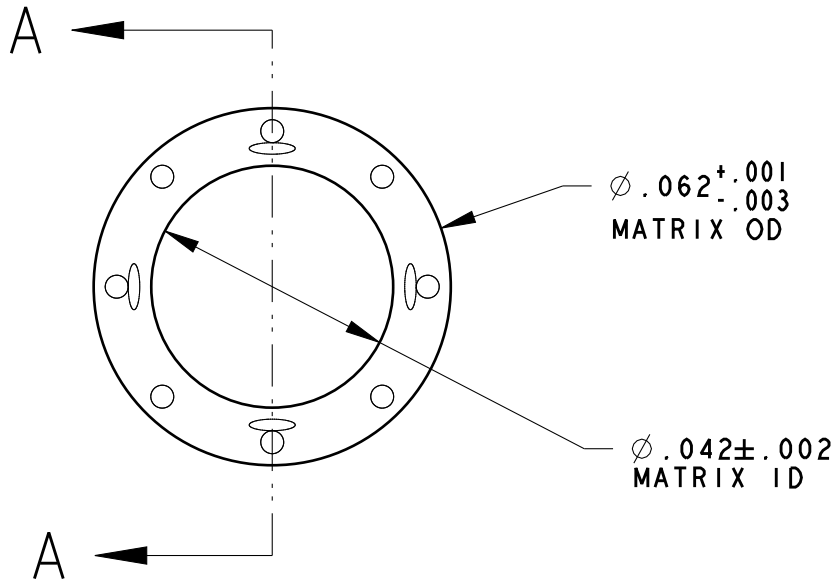
SHEET 1 OF 1



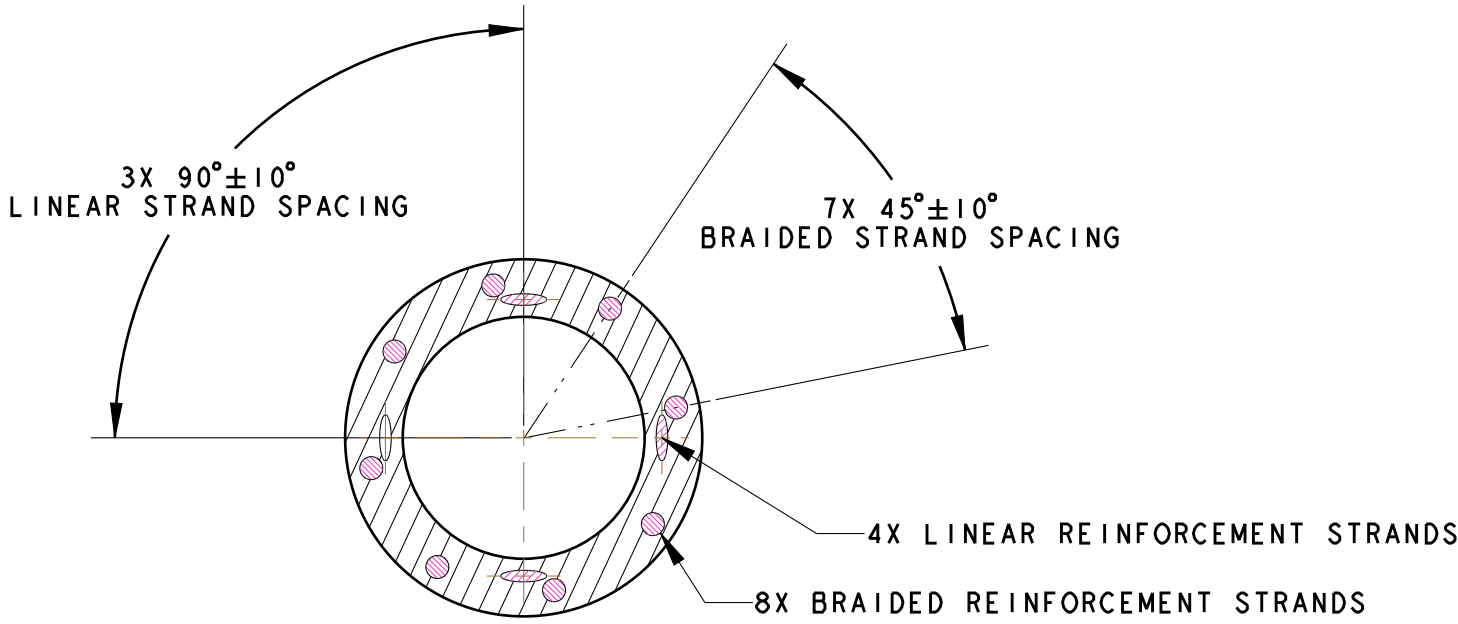
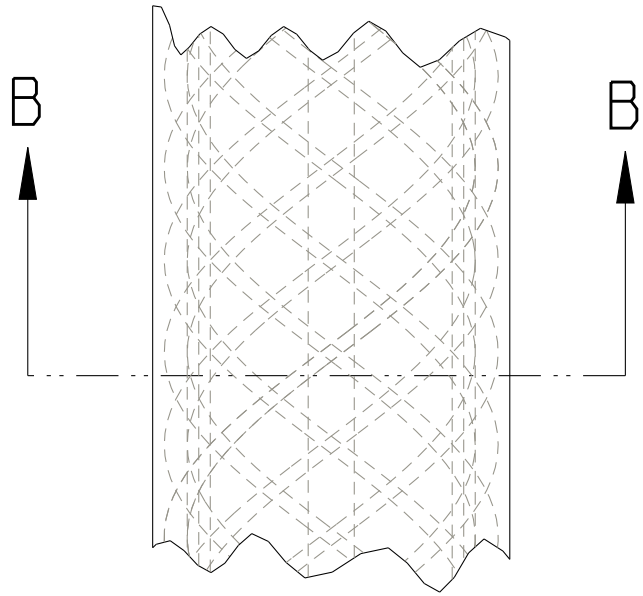
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PART NUMBER	REVISIONS			DATE
	ISS	SHEET ZONE	DESCRIPTION	
-	A		ORIGINAL ISSUE	4/22/10



SECTION A - A



SECTION B - B

CURRENT ISSUE APPROVALS		DATE
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CHECKED:	J. SHELTON 2614	
DESIGNED:	J. SHELTON 2614	
APPROVED:	R. WILD 2614	

DRAWING: INDV_RIBBON_TUBE	TITLE INDV RIBBON TUBE 4 LINEAR 8 BRAIDED	
MODEL: INDV_RIBBON_TUBE		
TYPE: ASSEM	PART CLASSIFICATION UNCLASSIFIED	SIZE C
SANDIA NATIONAL LABORATORIES (NM)		DRAWING CLASSIFICATION UNCLASSIFIED
ENGLISH		DRAWING NUMBER -
THIRD ANGLE PROJECTION		ISSUE A
ORIGIN PRO/E-WILDFIRE 4		CAGEC 14213 SCALE 30/1 SHEET 1 OF 1
STATUS SA-CHK - 4/22/10		



NOTES:

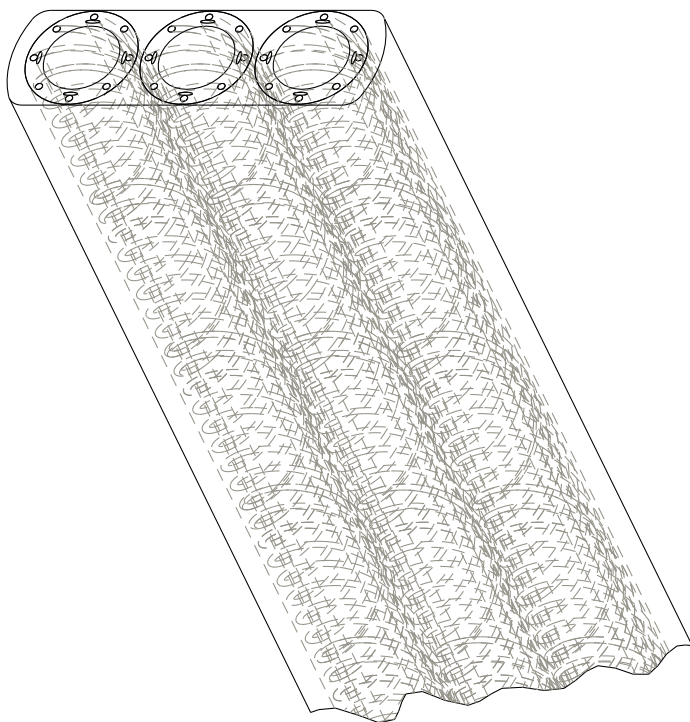
- 1. MATERIALS  
MATRIX: ARKEMA PEBAX 3533  
FIBER: DUPONT KEVLAR 29
- 2. FORM INDIVIDUAL FIBER REINFORCED TUBING PER "INDV RIBBON TUBE" DRAWING
- 3. BOND INDIVIDUAL FIBER REINFORCED TUBES TOGETHER USING ADDITIONAL MATRIX MATERIAL AND SUFFICIENTLY HIGH PROCESSING TEMPERATURES SUCH THAT A SINGLE CONTINUOUS MATRIX IS FORMED
- 4. OUTER DIMENSIONS OF THE FINAL PRODUCT MUST MEET THE REQUIREMENTS SHOWN AFTER ALL THERMAL PROCESSING IS COMPLETE
- 5. MATRIX THICKNESS BETWEEN ANY FIBER AND EXTERNAL BOUNDARY (INCLUDING INNER DIAMETER) MUST BE .001 INCHES OR GREATER AFTER ALL THERMAL PROCESSING IS COMPLETE
- 6. CUT TUBING TO  $120 \pm 1$  INCH LENGTH

PART NUMBER

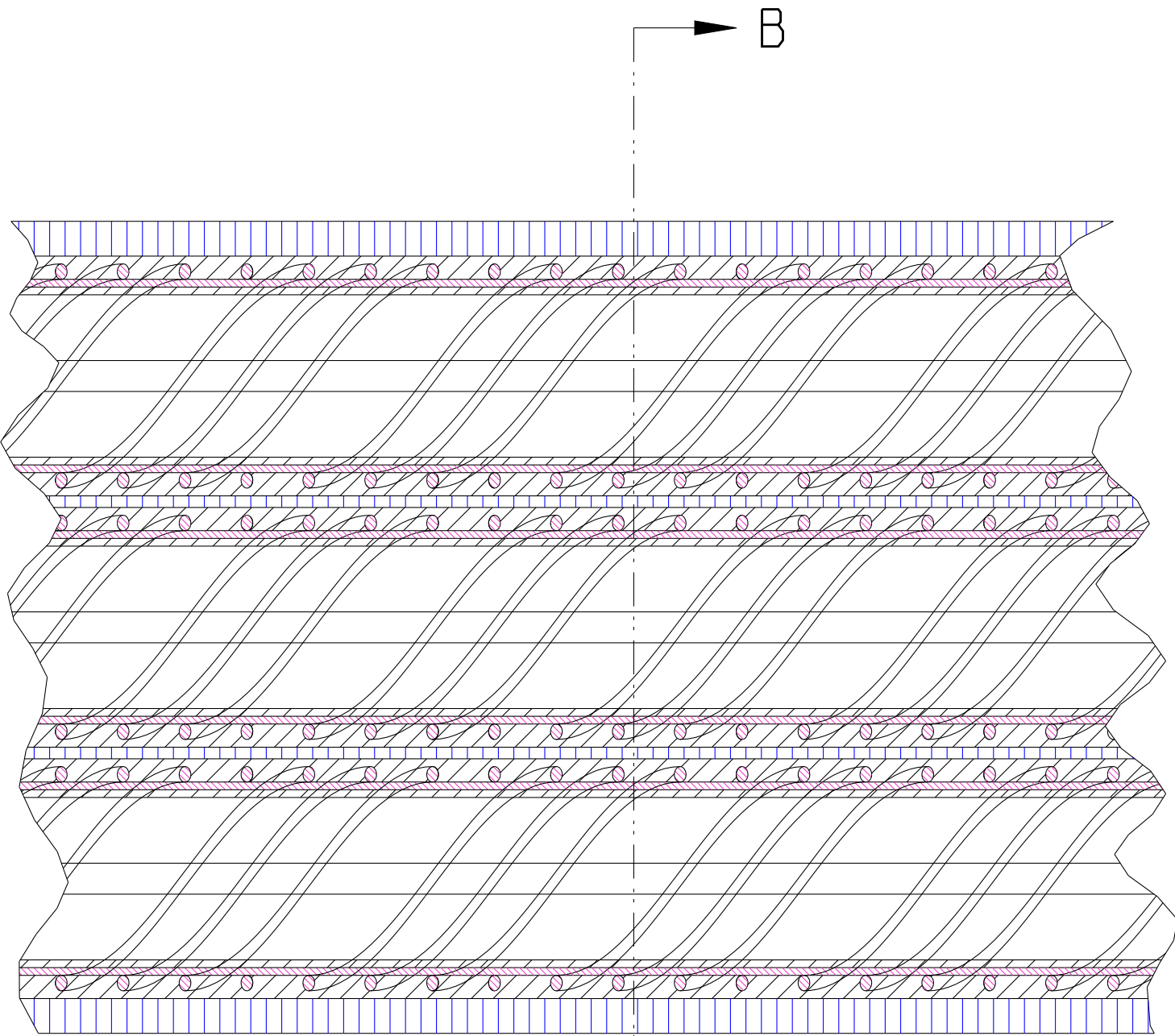
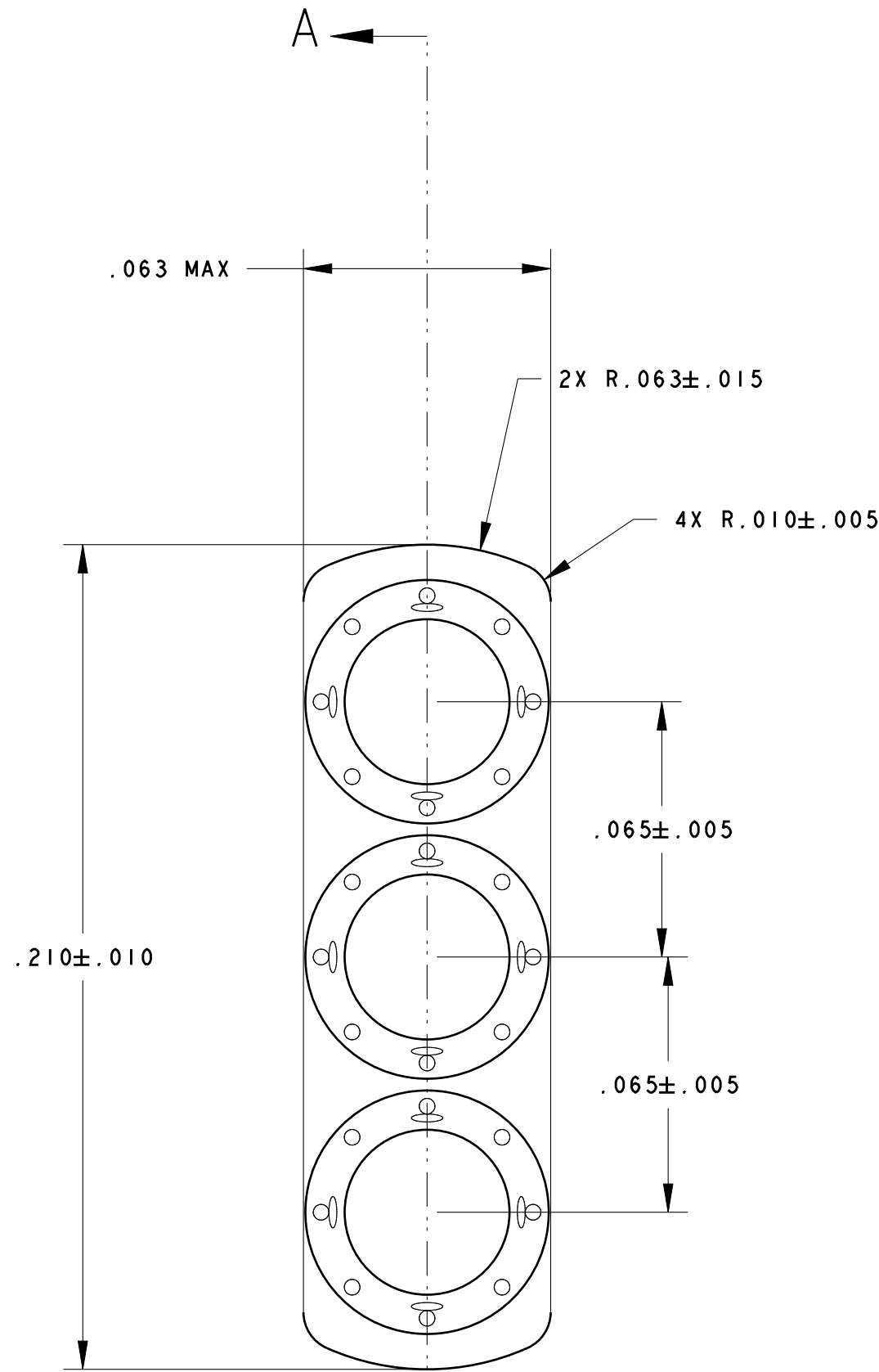
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REVISIONS

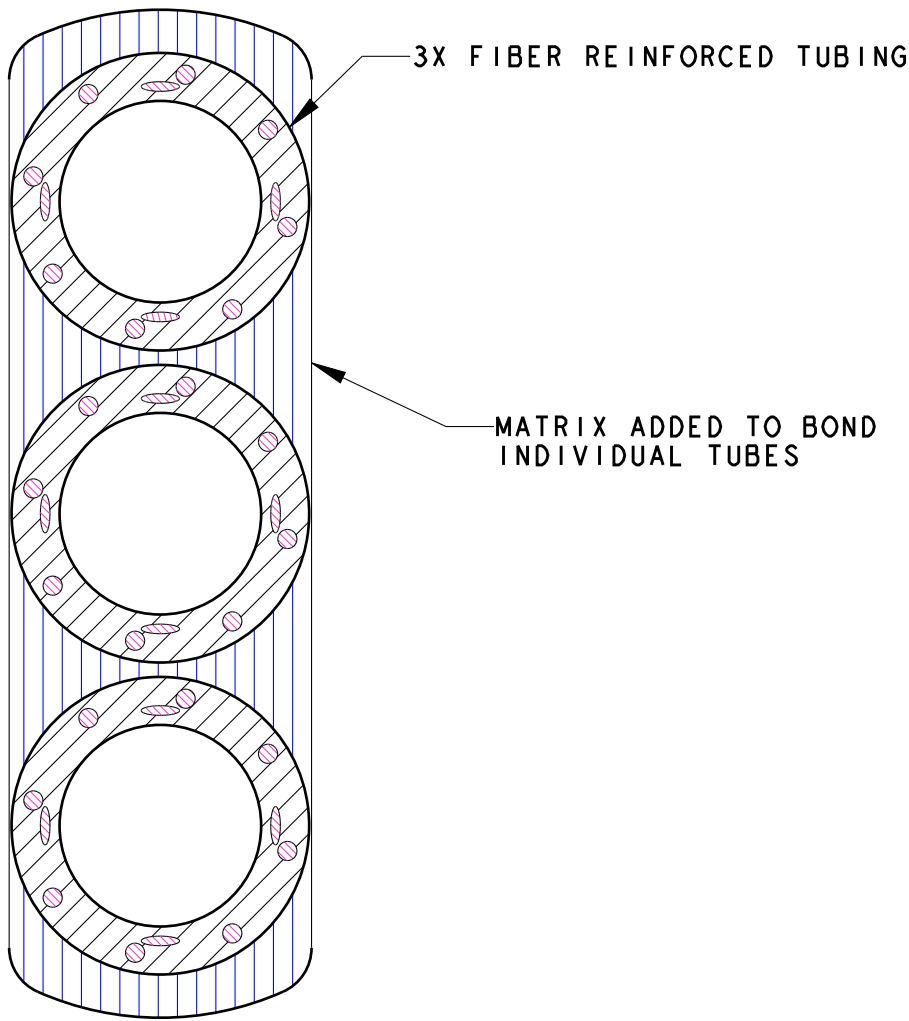
ISS	SHEET ZONE	DESCRIPTION	DATE
A		ORIGINAL ISSUE	4/26/10



SCALE 10/1



SECTION A - A



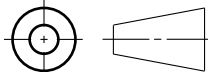
SECTION B - B

DRAWING: 3.CARRIER.RIBBON  
MODEL: 3.CARRIER.RIBBON  
TYPE: ASSEM

SANDIA NATIONAL  
LABORATORIES (NM)

ENGLISH

THIRD ANGLE  
PROJECTION



TITLE

3 CARRIER RIBBON TUBING

PART CLASSIFICATION

UNCLASSIFIED

DRAWING CLASSIFICATION

UNCLASSIFIED

SIZE

C

DRAWING NUMBER

-

ISSUE

A

ORIGIN PRO/E - WILDFIRE 4 STATUS SA - CHK - 4/26/10

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APPROVED:	R. WILD, 2614	