

GENERAL REQUIREMENTS

1. USE CURRENT APPROVED SW I BOM AS THE MASTER CONTROL DOCUMENT FOR MATERIAL, DOCUMENTS AND SOFTWARE. THIS BOM LISTS THE CORRECT REVISION OF EACH ITEM THAT IS TO BE PACKED.
2. PRIOR TO SHIPMENT, ALL LABELS MUST HAVE THE PROPER NUMBERS FOR SKU, ESN, IMEI, ETC, AS SPECIFIED IN THE LABEL DRAWING SPECS FOR THIS SKU
3. SHIPPED PRODUCT MUST CONFORM TO THE STANDARD DESCRIBED IN SW I DOC# 2140122 -GENERAL COSMETIC SPEC FOR SW I.
4. DIMENSIONS ARE SHOWN IN MILLIMETERS AND INCHES. DIMENSIONS IN INCHES ARE SHOWN IN [BRACKETS] .
5. RECOMMENDED PACKOUT SEQUENCE IS DESCRIBED BELOW:
- 5.1 APPLY MODULE LABEL OR LASER ETCH AND THEN PERFORM CONFIGURATION

5.2 BAKE MODULES AND THEN PERFORM FLATNESS CHECK IF REQUIRED BY PCS

5.3 PACKAGE MODULES INTO TAPE/REEL

5.4 LABEL INSERT REELS INTO VACUUM ESD BAG AND LABEL VACUUM ESD BAG, THEN INTO MANUFACTURING BOX

5.5 CLOSE, SEAL AND LABEL THE MANUFACTURING BOX

5.6 IF REQUIRED, INSERT MANUFACTURING BOX(ES) INTO APPROPRIATE OUTER BOXES. CLOSE, SEAL AND LABEL.

5.7 IF REQUIRED, PALLETIZE OUTER BOXES

5.8 PREPARE SHIPPING DOCUMENTS ACCORDING TO SIERRA LOGISTICS DEPT INSTRUCTIONS
6. THIS IS A TEMPLATE PACKOUT DRAWING FOR MANY DIFFERENT PRODUCTS. THERE ARE ENOUGH COMMONALITY BETWEEN THE SOLDERABLE MODULES THAT ONE TEMPLATE PACKOUT DRAWING CAN BE MADE. HOWEVER, SOME DIFFERENCES ARE PRESENT AND THE FACTORY SHALL REFERENCE DRAWING 2102002 FOR EXACT DETAILS CONCERNING: PIN DOT ORIENTATION, REEL MAXIMUM QUANTITY, OUTER BOX MAXIMUM QUANTITY, ETC. ALSO NOTE THAT PICTURES IN THIS PACKOUT DRAWING ARE FOR REPRESENTATION AND DESCRIPTION PURPOSES ONLY. WHEN FACTORY SEES AN EMPTY FIELD ___ IN THIS PACKOUT DRAWING, FACTORY SHALL REFERENCE DOCUMENT 2102002 FOR APPROPRIATE INFORMATION PERTAINING TO THE PRODUCT BEING PACKED OUT.
7. ONLY PACK OUT OR APPLY ITEMS WHOSE REFERENCE DESIGNATORS ARE FOUND IN THE SKU BOM.

REV	DESCRIPTION	DATE	DRAWN	APPD
1	PRODUCTION RELEASE	06-JUL-15	AL	GB
2	ADDED HL3 PRODUCT FAMILY	08-SEP-15	AL	TC
3	REMOVED TABLE 1 AND MOVED TO STAND-ALONE DOCUMENT; UPDATED INSTRUCTIONS FOR PACKING PIZZA BOXES INTO OUTER BOX; UPDATED VERBIAGE REGARDING AIR EVACUATION ASSOCIATED WITH SEALING VACUUM BAG	09-FEB-16	AL	AL

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE PER THE FOLLOWING TOLERANCES:

INCHES	MM	ANGLES
.X ± .05	.X ± .25	X ±5°
.XX ± .01	.XX ± .13	X.X ±1°
.XXX ± .005	.XXX ± .05	

PROJECT NAME
MULTI PRODUCTS

DRWN
A.LEE

DATE
06-JUL-15

DES ENGR
A.LEE

DATE
06-JUL-15

CHK
G.BOISSET

PRT FILENAME
2103079

RELEASE LEVEL

PART DESCRIPTION
PACKOUT DWG,SOLDERABLE MODULES,TEMPLATE

13811 Wireless Way
Richmond, British Columbia
Canada, V6V 3A4
Tel: 604.231.1100
Fax: 604.231.1109

SIZE C	UNITS MM	DRAWING NO. 2103079	REV 3
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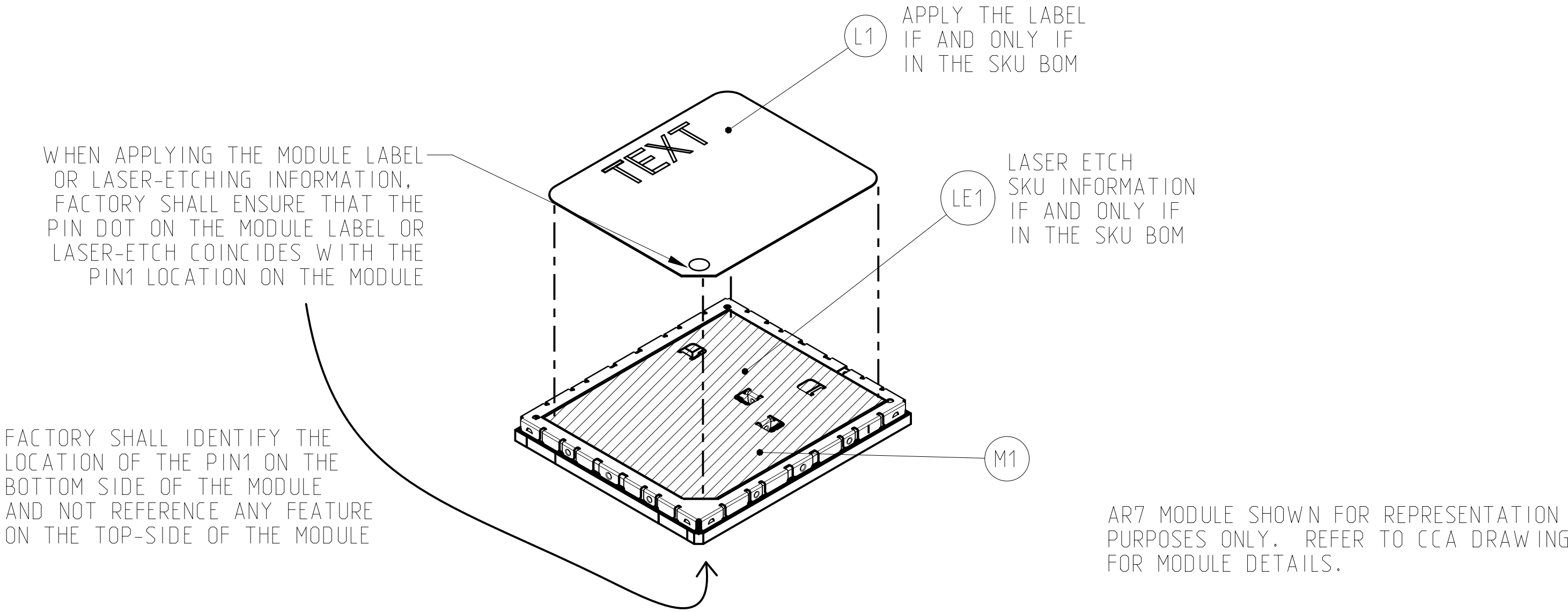
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SHEET 1 OF 10

DO NOT SCALE PRINT

APPLY MODULE LABEL OR ETCH SKU INFORMATION AND PERFORM CUSTOMIZATION

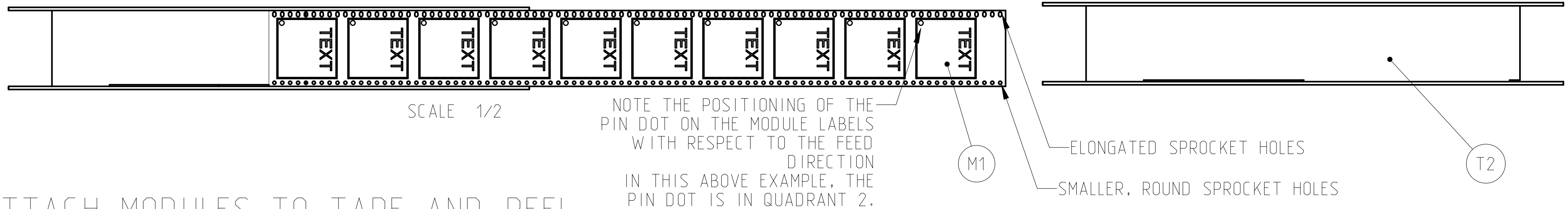
- 1. IF AND ONLY IF LABEL (L1) EXISTS IN THE SKU BOM, THEN APPLY MODULE LABEL (L1) TO MODULE (M1) AND ORIENT AS DESCRIBED BELOW. EXERCISE CAUTION TO ENSURE THE PIN DOT ON THE LABEL COINCIDES WITH THE PIN1 LOCATION OF THE MODULE.
- 2. MODULE LABEL (L1) SHALL BE PLACED CENTERED ON THE SHIELD LID VERTICALLY AND HORIZONTALLY $\pm 1.5\text{mm}$
- 3. HOWEVER, IF LABEL (L1) DOES NOT EXIST IN THE SKU BOM, AND LASER ETCH SPEC (LE1) EXISTS, THEN ETCH THE SKU INFORMATION ONTO THE SHIELD LID. EXERCISE CAUTION TO ENSURE THAT THE PIN DOT ON THE LASER-ETCH COINCIDES WITH THE PIN1 LOCATION OF THE MODULE.
- 4. PERFORM CUSTOMIZATION



BAKE MODULES

- 1. INSERT MODULES INTO BAKING CHAMBER.
- 2. MODULES ARE TO BE BAKED AT $___^{\circ}\text{C} \pm \text{---}^{\circ}\text{C}$, FOR $___$ HOURS $\pm \text{---}$ HOURS.
- 3. MODULES ARE TO BE RE-BAKED IF THEY ARE NOT PACKAGED INTO THEIR VACUUM BAGS WITHIN $___$ HOURS OF FIRST BAKING CYCLE.
- 4. IF REQUIRED BY THE PRODUCT PCS, PERFORM FLATNESS CHECK OF THE PRODUCT BEING PACKAGED

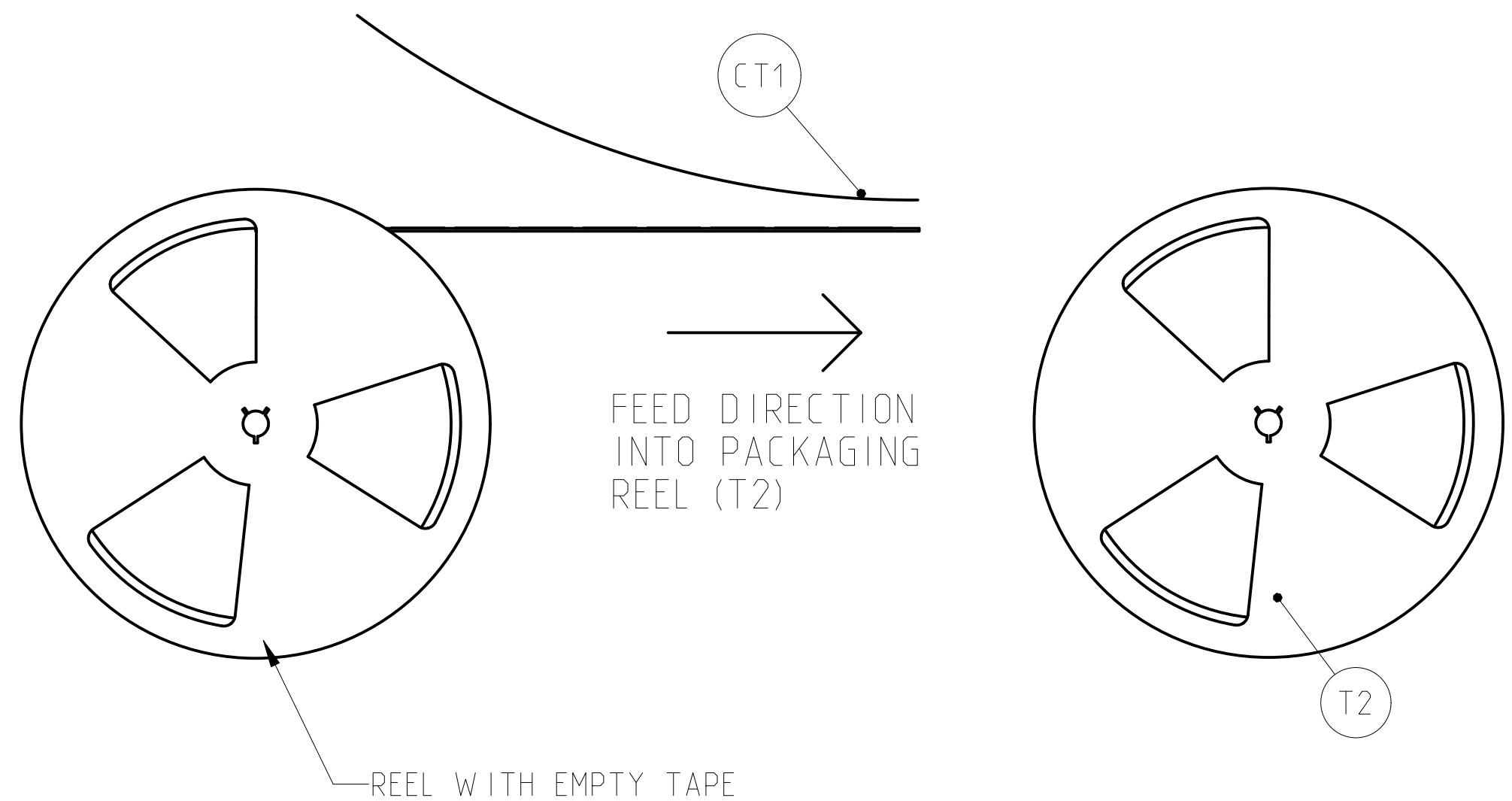
FEED DIRECTION INTO PACKAGING REEL (T2)



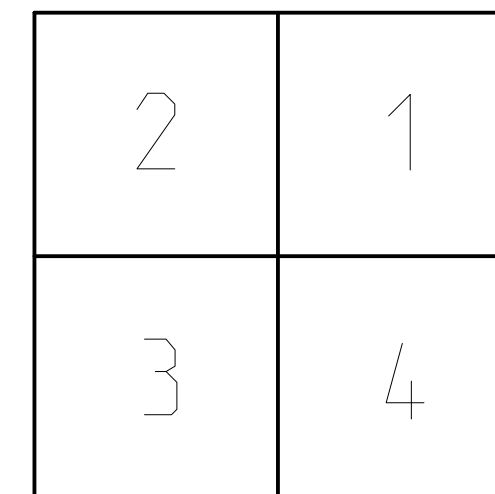
ATTACH MODULES TO TAPE AND REEL

- A. A SMALL PACKAGE IS DEFINED AS A SHIPMENT HAVING MAXIMUM OF ___ UNITS. IF ORDER SIZE IS A SMALL PACKAGE, FACTORY MAY SELECT APPROPRIATE PACKAGING MATERIAL TO PACKAGE THE UNITS, AND NOT FOLLOW THE DIRECTIONS IN THE REMAINDER OF THIS PACKOUT DRAWING. IF THE ORDER SIZE IS LARGER THAN THE MAXIMUM NUMBER OF UNITS, FACTORY SHALL PROCEED TO FOLLOW THIS PACKOUT DRAWING.
- B. NOTE FOR HANDLING TAPE AND REEL: WHETHER IT IS BEFORE OR AFTER THE MODULES HAVE BEEN LOADED ONTO THE TAPE AND REEL, WHEN HANDLING THE TAPE AND REEL, EXERCISE CAUTION AND DO NOT APPLY FORCE TO THE CARRIER TAPE THAT IS EXPOSED BY THE OPENINGS ON THE REEL. THIS PRACTICE IS TO BE FOLLOWED THROUGHOUT THE PACKAGING OF THIS PRODUCT.

1. USE THE TAPE-AND-REEL MACHINE TO FEED EMPTY TAPE INTO PACKAGING REEL (T2), AS SHOWN ABOVE. WHILE EMPTY TAPE IS BEING FED INTO PACKAGING REEL (T2), LOAD MODULES (M1) ONTO THE TAPE. EACH TAPE AND REEL CAN HOLD A MAXIMUM OF ___ MODULES.
2. BEFORE FEEDING TAPE AND MODULES INTO PACKAGING REEL (T2), FACTORY MUST FEED A MINIMUM OF 160mm OF EMPTY CARRIER TAPE (NO MODULES LOADED) INTO THE PACKAGING REEL (T2) FIRST. AND AFTER LOADING THE MODULES INTO THE PACKAGING REEL, FACTORY MUST LOAD A MINIMUM ADDITIONAL 400mm OF EMPTY CARRIER TAPE INTO THE REEL.
3. WHEN PLACING MODULES (M1) ONTO THE CARRIER TAPE (T1), ENSURE THAT MODULE LABELS (L1) ARE FACING UPWARDS. ENSURE ALSO THAT THE PIN DOT ON THE MODULE LABEL OR LASER-ETCH IS IN QUADRANT ____. REFERENCE BELOW FIGURE FOR THE QUADRANT LOCATIONS ON THE MODULE. NOTE THAT THE QUADRANT INDICATION IS ONLY FOR THE MODULES WHEN THEY ARE BEING PACKED OUT, AND NOT INDICATIVE OF THE MODULE ORIENTATION WHEN THE CUSTOMER IS UNREELING THE TAPE AND REEL.
4. APPLY COVER TAPE (CT1) TO THE TAPE AFTER LOADING MODULES (M1) ARE LOADED WHILE TAPE IS BEING FED INTO PACKAGING REEL (T2)



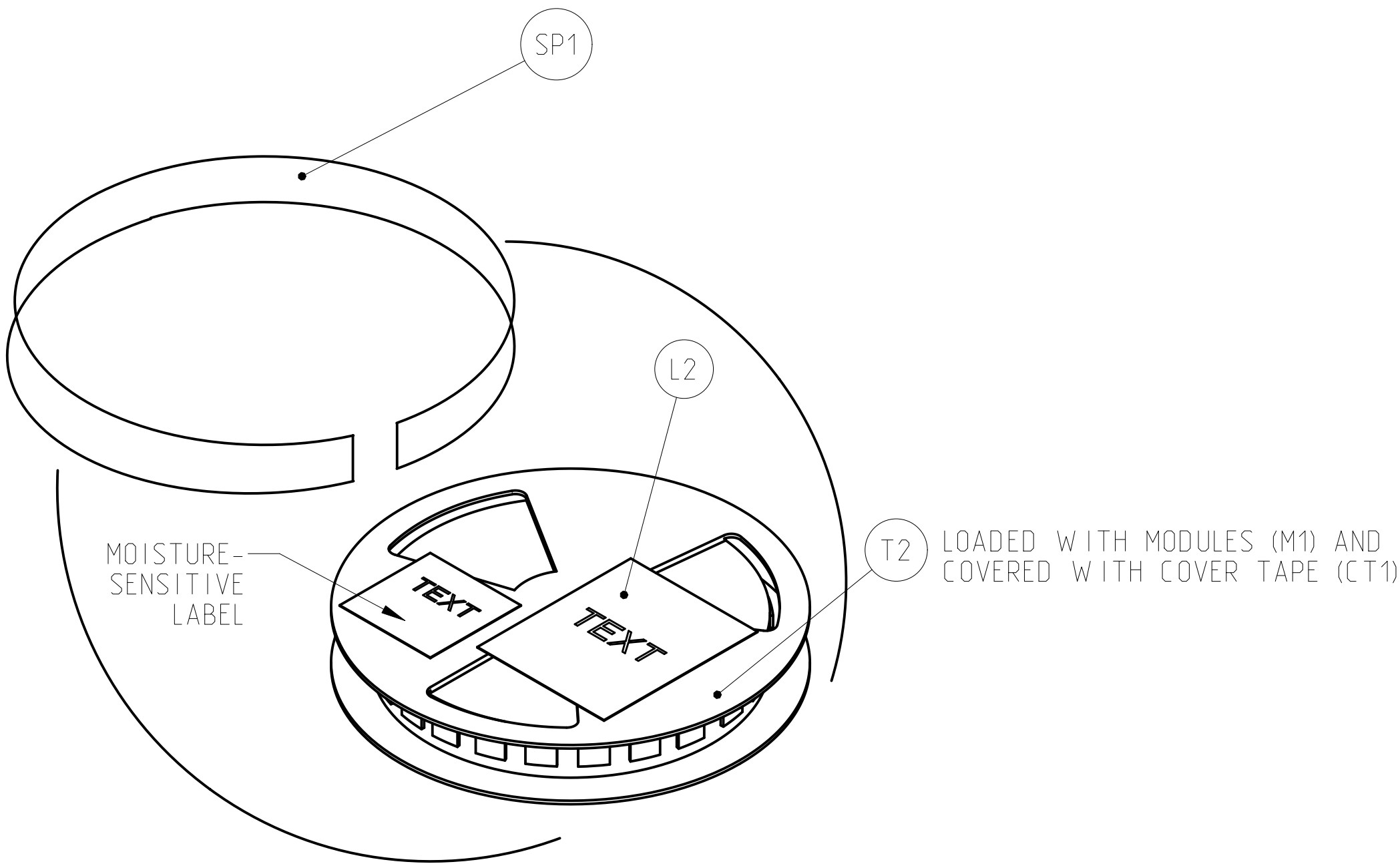
FEED DIRECTION INTO PACKAGING REEL (T2)



QUADRANT INDICATOR

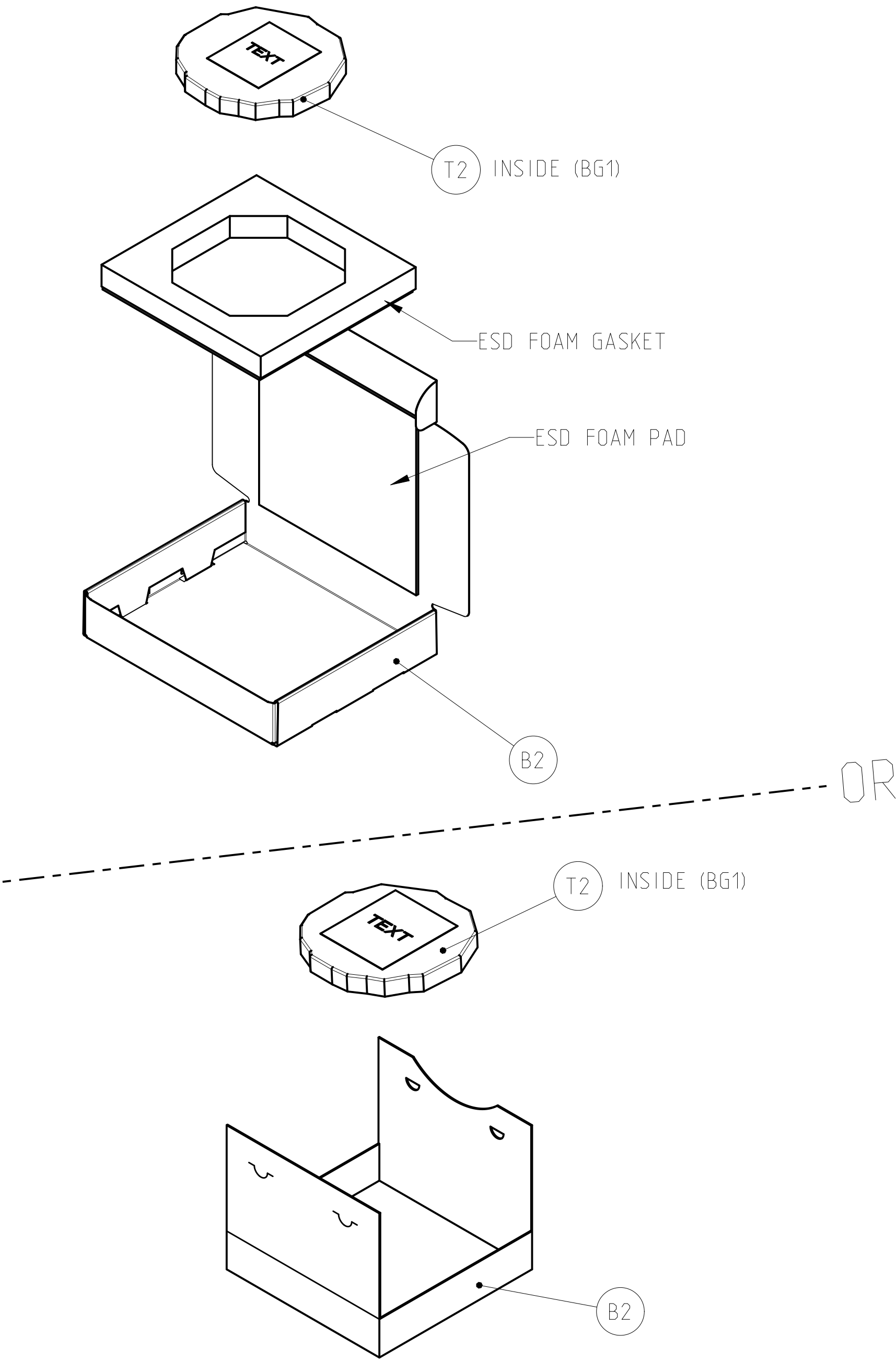
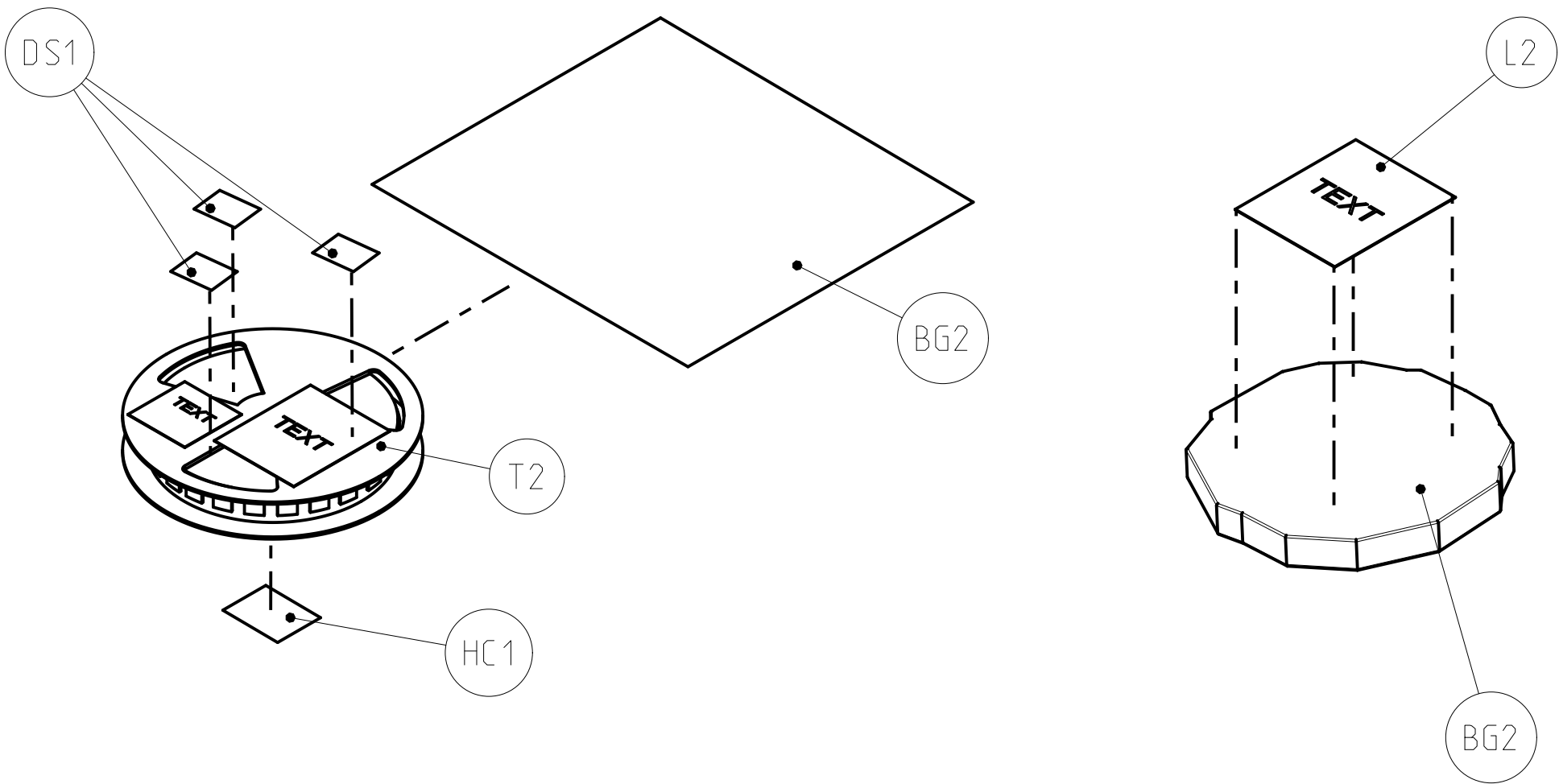
APPLY ESD STRAP AND LABEL TO REEL

- 1. APPLY ONE ESD-STRAP (SP1) TO THE OUTSIDE BAND OF THE REEL (T2).
- 2. APPLY MANUFACTURING BOX LABEL (L2) TO REEL (T2). POSITION AS SHOWN BELOW.
- 3. ENSURE MOISTURE-SENSITIVE LABEL IS APPLIED TO THE REEL BY REEL SUPPLIER.



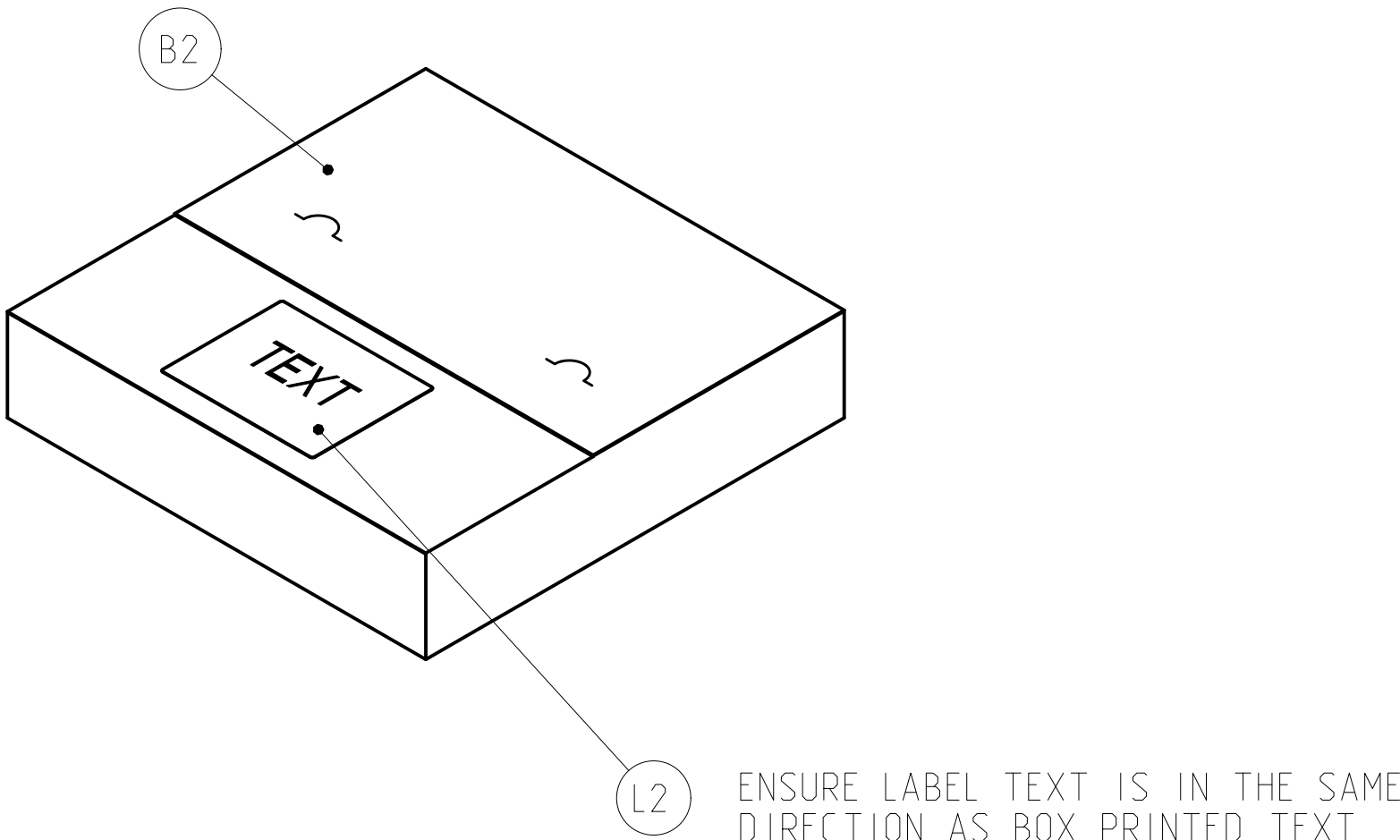
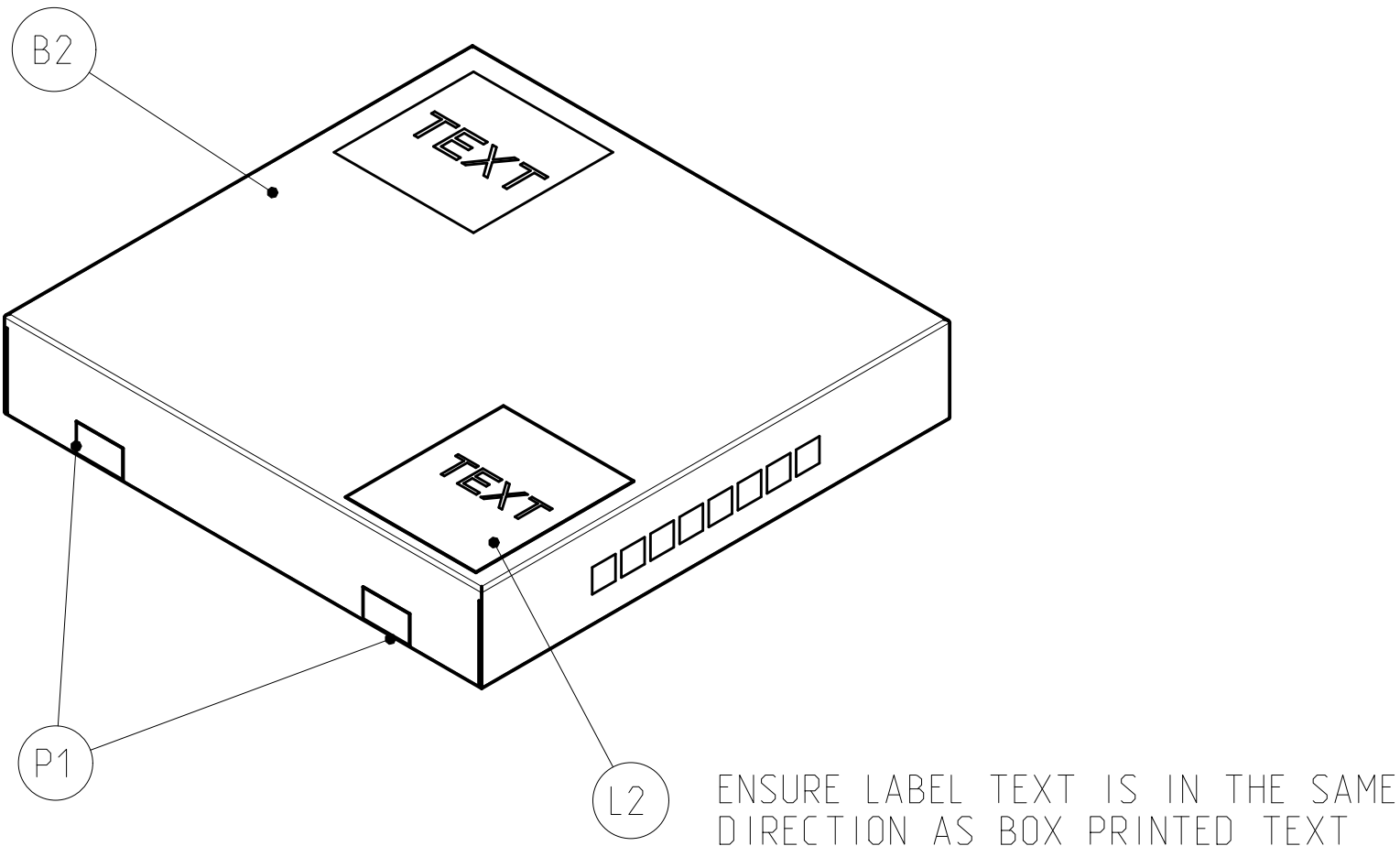
PACKAGING OF REEL

- 1. PLACE ___ DESICCANTS (DS1) ON TOP OF REEL (T2).
- 2. INSERT ONE HUMIDITY CARD (HC1), ALONG WITH REEL AND DESICCANTS, INTO VACUUM BAG (BG1), ON THE OPPOSITE SIDE OF THE DESICCANTS ON THE REEL (T2). HUMIDITY CARD (HC1) MUST BE PACKAGED INTO VACUUM BAG (BG2) WITHIN 10 MINUTES FROM ITS REMOVAL FROM THE ORIGINAL PACKAGING. LIGHT AIR EVACUATION IS RECOMMENDED BEFORE SEALING BAG (BG1). FACTORY SHALL ENSURE THAT AMOUNT OF AIR EVACUATION IS CONSISTENTLY REPEATED.
- 3. APPLY MANUFACTURING BOX LABEL (L2) TO VACUUM BAG (BG2).
- 4. INSERT THE PACKAGED REEL (T2) INTO MANUFACTURING BOX (B2). THE MANUFACTURING BOXES HAVE DIFFERENT STYLES DEPENDING ON PRODUCT. FOR EXACT REPRESENTATION, REFER TO THE (B2) SPECIFICATION DRAWING IN THE ARENA BOM.
- 5. CLOSE MANUFACTURING BOX (B2)



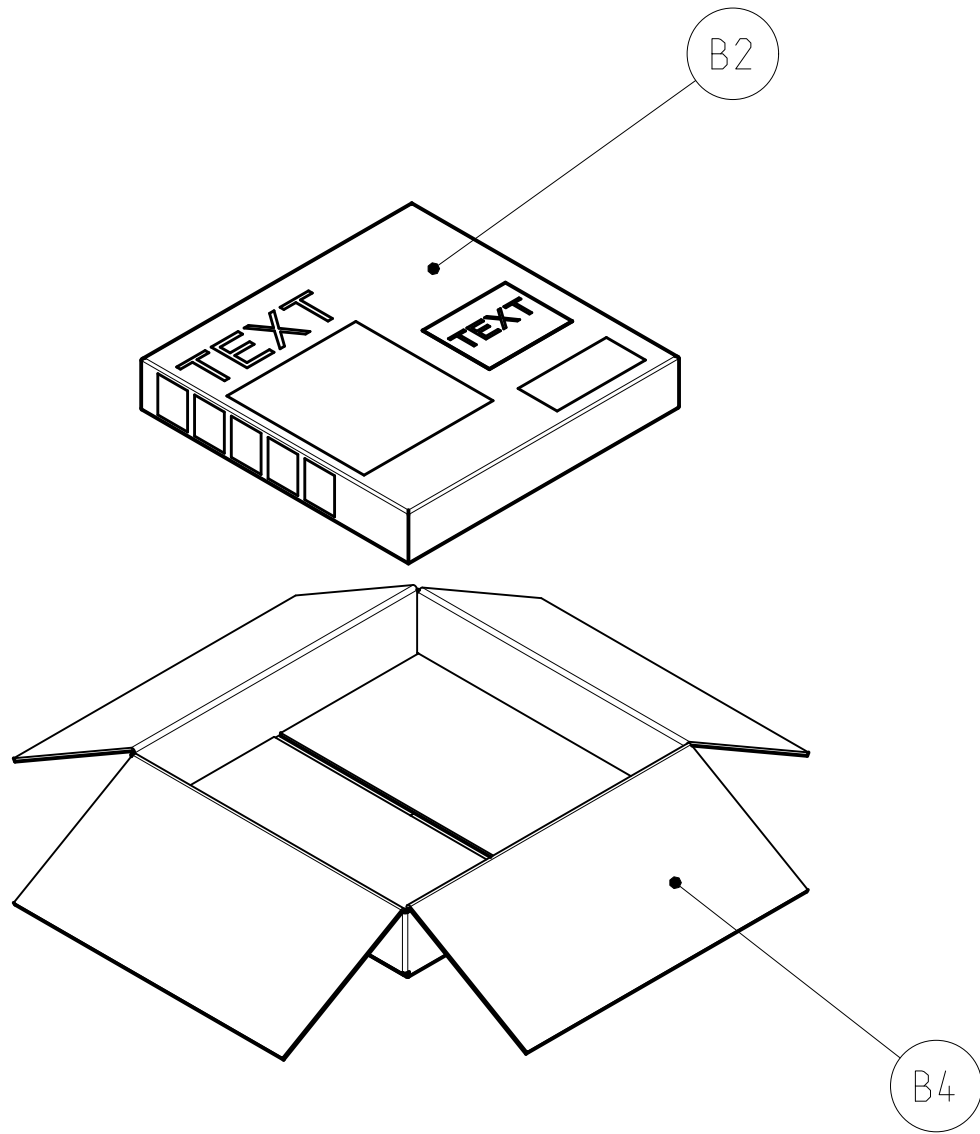
SEAL AND LABEL MANUFACTURING BOX

1. SEAL MANUFACTURING BOX (B2) SHUT WITH SECURITY TAPE (P1) IF NEEDED IN THE FIGURES BELOW.
2. APPLY MANUFACTURING BOX LABEL (L2) TO MANUFACTURING BOX (B2) AT THE LOCATIONS INDICATED BY THE BELOW TWO FIGURES. ONLY FOLLOW THE RELEVANT FIGURE, DEPENDING ON THE BOX STYLE REQUIRED BY THE SKU BOM.



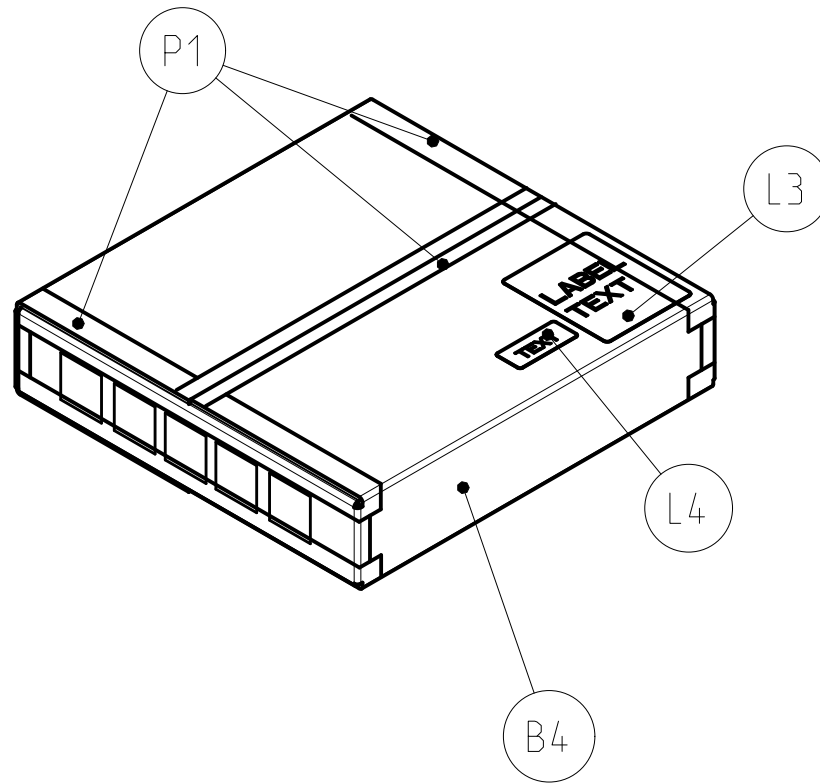
PACKAGING FOR SHIPMENT QUANTITY NO MORE THAN ONE FULL MANUFACTURING BOX

1. IF AND ONLY IF OUTER BOX (B4) EXISTS IN THE SKU BOM, THEN INSERT UP TO ONE MANUFACTURING BOX (B2), INTO ONE OUTER BOX (B4). ORIENT MANUFACTURING BOX (B2) AS SHOWN BELOW. ELSE, REFER TO THE FOLLOWING PAGE FOR FURTHER PACKOUT INSTRUCTIONS.
2. FILL ANY REMAINING SPACE IN OUTER BOX (B4) WITH FILLER MATERIAL



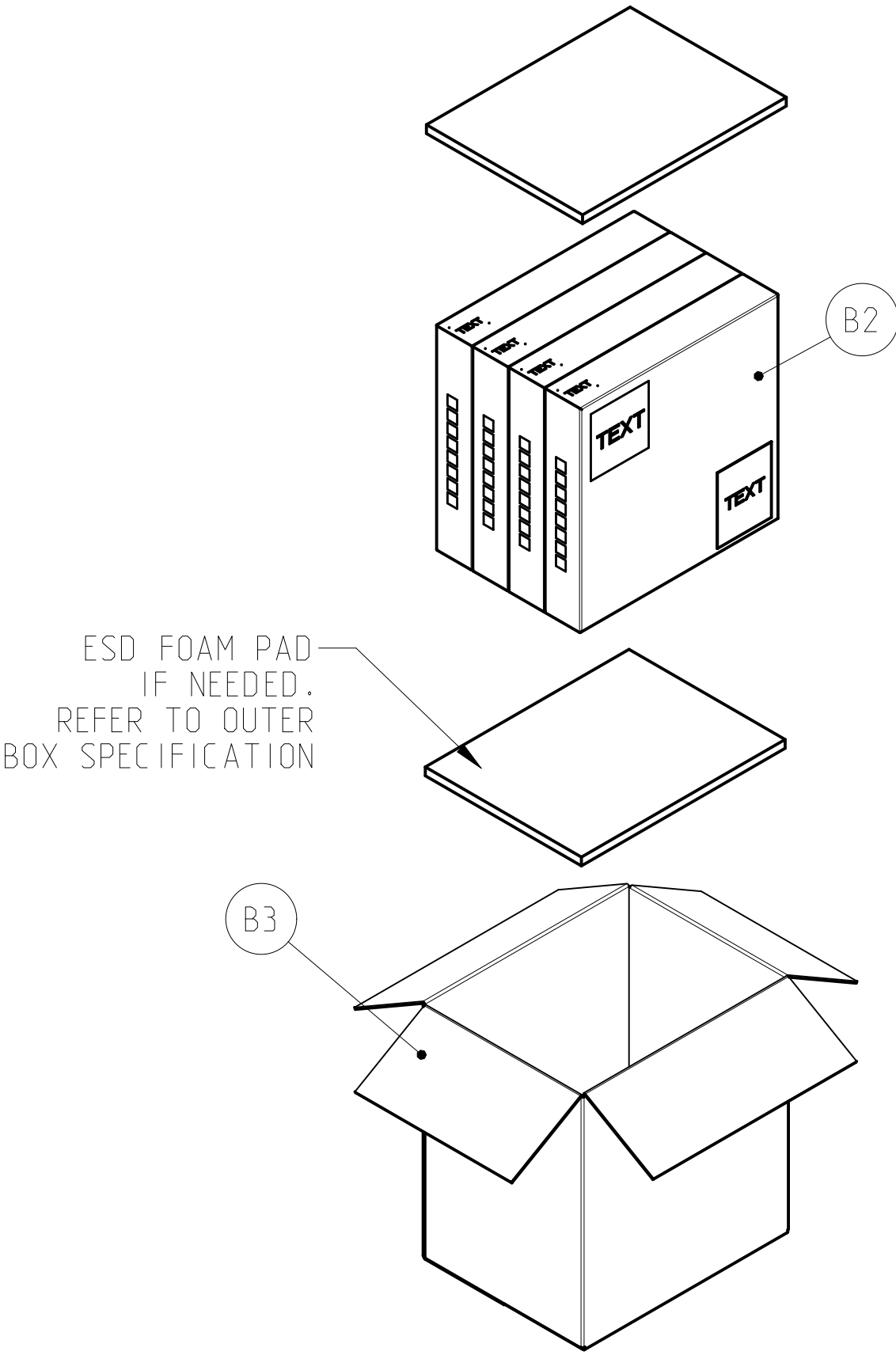
APPLY TAPE AND LABELS TO OUTER BOX

1. CLOSE OUTER BOX (B4) AND SEAL IT SHUT WITH SECURITY TAPE (P1). ENSURE ALL WIDTH, HEIGHT AND LENGTH OPENINGS ARE SEALED.
2. APPLY OUTER BOX LABEL (L3) TO OUTER BOX (B4). AND, IF REQUIRED IN THE BOM, APPLY DN-LABEL (L4) TO OUTER BOX (B4).
3. REFER TO SWI LOGISTICS GROUP FOR PACK LIST AND SHIPPING INSTRUCTIONS.



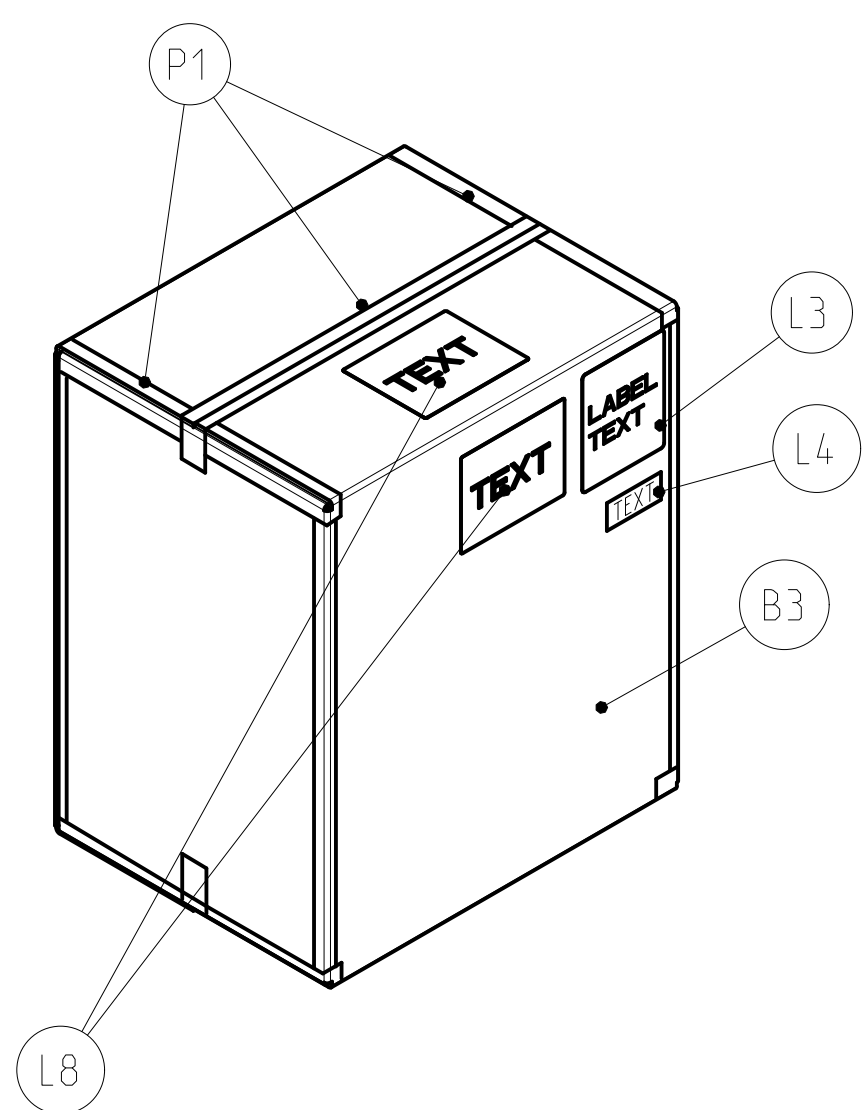
PACKAGE MANUFACTURING BOXES INTO OUTER BOX

1. INSERT UP TO ____ MANUFACTURING BOXES (B2), INTO ONE OUTER BOX (B3). THE FIGURE ON THE RIGHT REPRESENTS A MANUFACTURING BOX MAXIMUM QUANTITY OF 4.
2. FOR ORIENTATION OF MANUFACTURING BOXES (B2), THEN REFER TO 2102002 FOR THE MANUFACTURING BOX ORIENTATION WITHIN THE OUTER BOX. THE REPRESENTATION BELOW SHOWS THE FOLLOWING CONFIGURATION:
BOX LABELS FACING: OUTER BOX'S LARGEST SIDE FACE
BOX HANDLING SYMBOLS FACING: UPWARDS
3. ALL MANUFACTURING BOXES INSIDE THE SAME OUTER BOX MUST HAVE THE SAME PRODUCT TYPE, HARDWARE VERSION, AND EMBEDDED SOFTWARE.
4. IF OUTER BOX IS NOT FILLED FULL WITH MANUFACTURING BOXES, FILL REMAINING SPACE WITH EMPTY MANUFACTURING BOXES AND LABEL BOXES WITH TEXT "EMPTY", MINIMUM 1" TEXT HEIGHT.



APPLY TAPE AND LABELS TO OUTER BOX

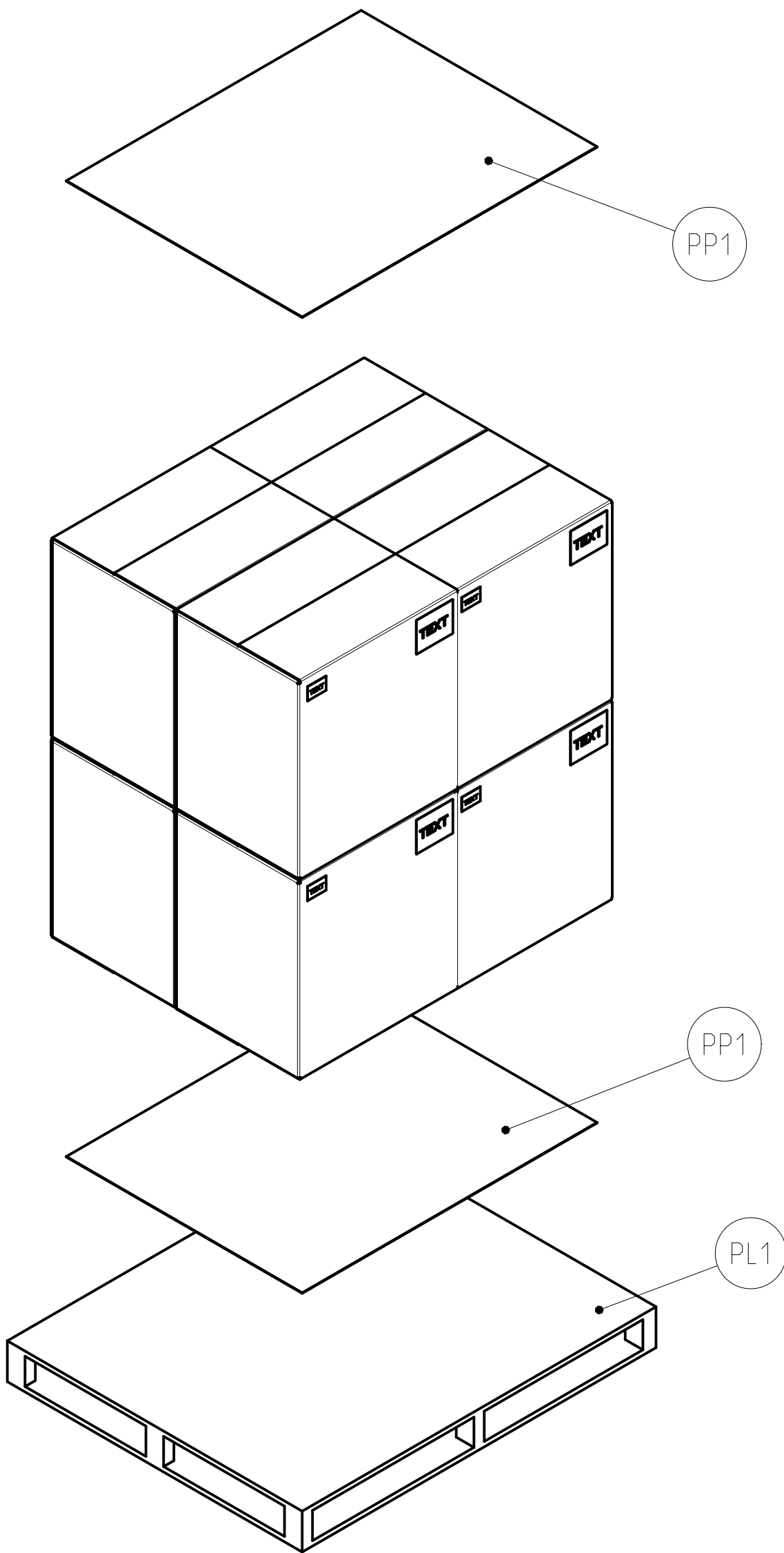
1. CLOSE OUTER BOX (B3) AND SEAL IT SHUT WITH SECURITY TAPE (P1). ENSURE ALL WIDTH, HEIGHT AND LENGTH OPENINGS ARE SEALED.
2. APPLY OUTER BOX LABEL (L3) TO OUTER BOX (B3). AND IF REQUIRED, APPLY DN LABEL (L4) TO THE OUTER BOX (B3).
3. APPLY "HEAVY-LIFT" LABEL (L8) TO OUTER BOX (B3) IF IT IS LISTED IN THE SKU BOM AND THE FULLY PACKAGED BOX (B3) WEIGHS MORE THAN 17 KILOGRAMS. FACTORY SHALL DETERMINE HOW MANY UNITS PACKED IN A BOX WILL CAUSE THE BOX TO EXCEED A 17 KILOGRAM WEIGHT, AND THEN SET UP A RULE TO APPLY A "HEAVY-LIFT" LABEL (L8) TO THE OUTER BOX (B3) IF THE OUTER BOX QUANTITY EXCEEDS THIS UNIT QUANTITY.
4. IF THE TOTAL QUANTITY OF BOXES DO NOT EXCEED ONE PALLET LAYER, PACK AND LABEL THE OUTER BOXES AND THEN REFER TO SWI LOGISTICS GROUP FOR PACK LIST AND SHIPPING INSTRUCTIONS. ELSE, REFER TO NEXT SHEETS FOR PALLETISATION INSTRUCTIONS.



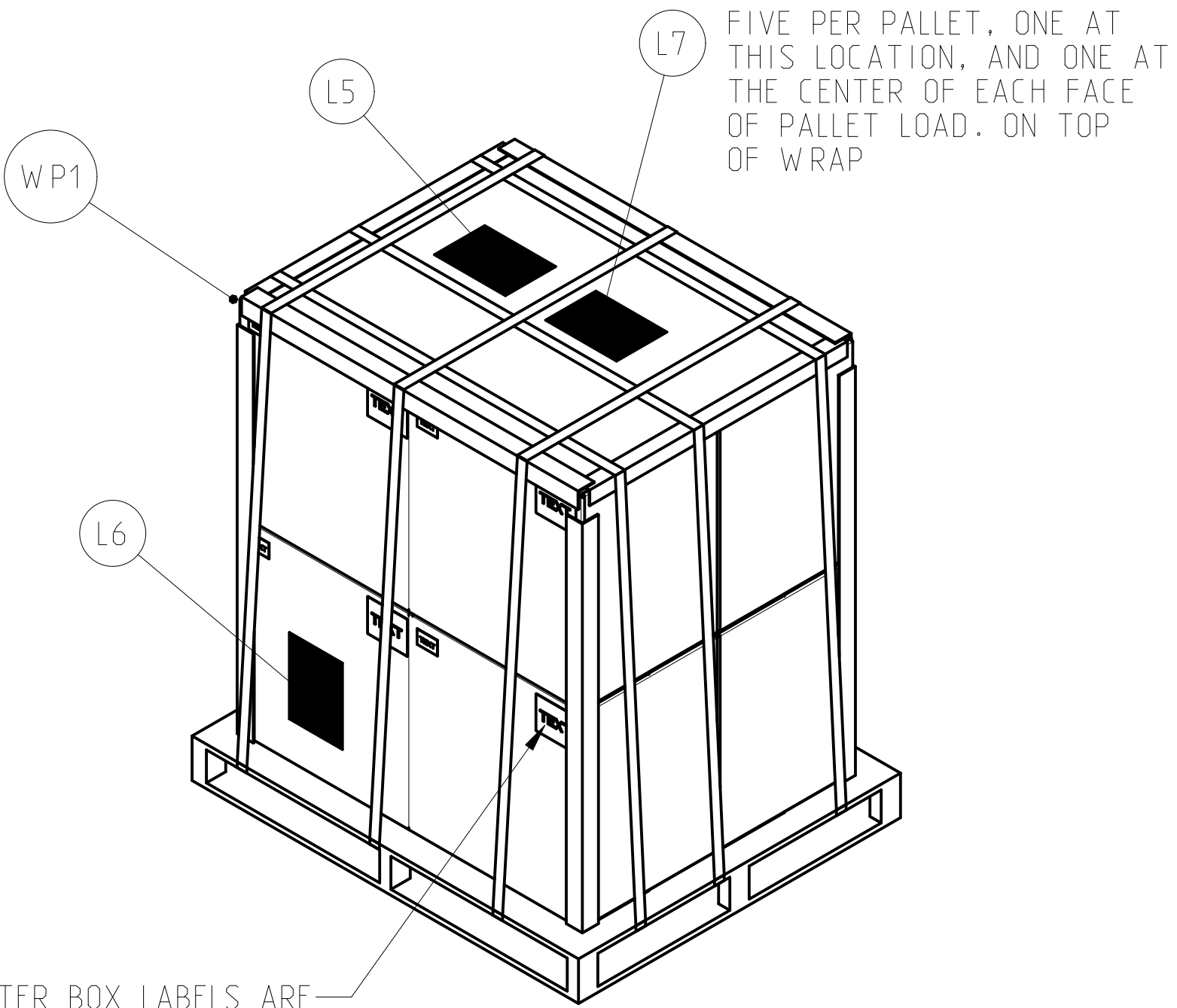
APPLY "HEAVY-LIFT" LABEL IF IT IS LISTED IN THE SKU BOM AND PACKAGED BOX EXCEEDS 17 KILOGRAMS IN WEIGHT

PALLETISATION INSTRUCTIONS

- A. FACTORY SHALL ONLY PALLETISE IF A PALLET (PL1) EXISTS IN THE SKU BOM.
- B. WHEN POPULATING THE PALLET, FACTORY MUST ENSURE THAT THE BOXES DO NOT OVERHANG FROM THE WOODEN PALLET (PL1). THE MAXIMUM HEIGHT OF THE LOADED PALLET MUST NOT EXCEED ____mm, INCLUDING THE PALLET. FOR MAXIMUM PALLET HEIGHT, REFER TO 2102002.
1. PLACE ONE PALLET PAD (PP1) ON TOP OF THE WOODEN PALLET (PL1), AT THE CENTER OF PALLET.
2. PLACE UP TO ___ OUTER BOXES (B3) PER LAYER ON THE PALLET. FOR REPRESENTATION PURPOSES ONLY, FIGURE BELOW SHOWS A PALLET WITH 4 BOXES PER LAYER AND 2 LAYERS MAXIMUM.
3. PLACE OUTER BOXES (B3) UP TO ___ LAYERS PER PALLET AS SHOWN. FOR REPRESENTATION PURPOSES ONLY, FIGURE BELOW SHOWS A PALLET WITH 4 BOXES PER LAYER AND 2 LAYERS MAXIMUM.
4. PLACE ONE PALLET PAD (PP1) ON TOP OF THE LOADED MASTER BOXES (B2), AT THE CENTER.
5. THE PALLET CONTENTS ARE PROTECTED WITH NYLON STRAPPING AND CORNER EDGE BEADS. CORNER EDGE BEADS WILL BE PLACED ON ALL VERTICAL AND HORIZONTAL EDGES.
6. WRAP PALLET CONTENTS WITH SHRINK WRAP (WP1) PRIOR TO SHIPMENT. REFER TO ARENA BOM FOR SHRINK WRAP COLOR AND SPECIFICATIONS. IF NO SHRINK WRAP IS SPECIFIED IN THE ARENA BOM, FACTORY IS TO SELECT AN APPROPRIATE SHRINK WRAPPING MATERIAL, CLEAR COLOUR.
7. ATTACH ONE PALLET LABEL (L5) AND ONE DUMP-RESISTANCE LABEL (L6) TO PALLET LOAD AT LOCATIONS INDICATED BELOW.
8. APPLY 5 DO-NOT-STACK LABELS (L7) AS FOLLOWS:
- 8.1 ONE LABEL ATTACHED TO THE TOP OF THE PALLET, CENTERED ON THE PALLET PAD, ON TOP OF WRAP.
- 8.2 ONE LABEL AT THE CENTER OF EACH FACE OF THE PALLET LOAD, ON TOP OF WRAP.



WRAP PALLET WITH SHRINK WRAP PRIOR TO SHIPMENT



ENSURE ALL OUTER BOX LABELS ARE VISIBLE AROUND PALLET PERIMETER