

**Kindly write in your Training Record**

**Training Course: Gluing Training and Orientation**

**Venue: Meeting Room**

**Date/Time: May 16, 2025/1300-1430H**

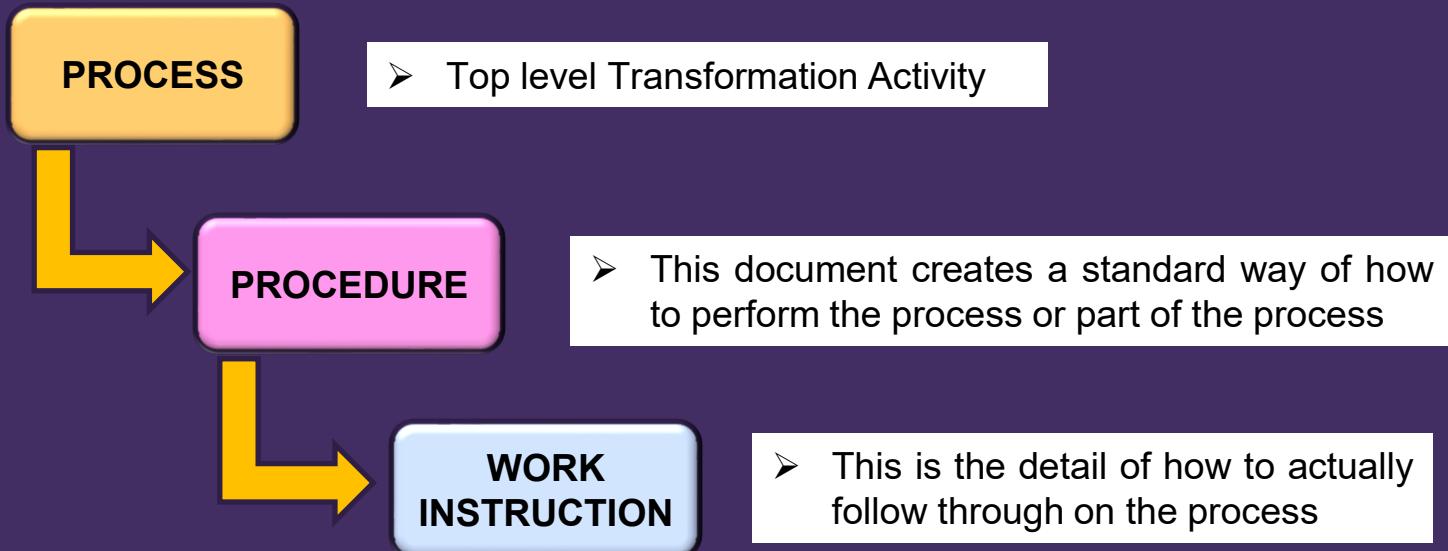
**Trainor: Ms. Judy Ann Sarmiento**

**Don't forget to affix your signature.**

# GLUING ORIENTATION

PREPARED BY:  
JUDY SARMIENTO

# PROCESS, PROCEDURE AND WORK INSTRUCTION



# TRAINING AGENDA

1. 7 Production Procedures
2. KPPI ISO Certification
3. CROR, Environmental Aspect & Impact, HIRADC
4. Gluing Work Instruction
5. Reading of Drawing
6. Types of Materials
7. Use of Meter Tape
8. Gluing Reminders
9. Use of Scanner
10. Handhole Work Instruction
11. Safety Reminder
12. Q.A
13. Written Examination

# 7 PRODUCTION PROCEDURES

PRODUCTION JOB CONTROL  
PROCESS

PRODUCTION MATERIAL  
PLANNING AND ORDERING

MACHINE OPERATION  
PROCESS

PRODUCTION TRAINING  
PROCESS AND SKILL LEVEL  
QUALIFICATION

PRODUCTION TOOLS CONTROL

PRODUCTION LINE CLEARANCE

PRODUCTION ASSEMBLY  
OPERATIONS

# KPPI ISO CERTIFICATIONS

## **ISO 9001: 2015**

QUALITY MANAGEMENT SYSTEM  
(CONSISTENT, CONFORMING  
PRODUCTS)

~Focuses on quality

## **ISO 14001: 2015**

ENVIRONMENTAL MANAGEMENT  
SYSTEM (PREVENTION OF  
POLLUTION)

~Focuses on environment

## **ISO 45001: 2018**

OCCUPATIONAL HEALTH AND  
SAFETY MANAGEMENT SYSTEM  
(SAFE WORKING CONDITIONS)

~Focuses on safety

# CROR, ENVIRONMENTAL ASPECT & IMPACT, HIRADC

## Context, Risks and Opportunities Registry

~To assess the risk in context with the overall context of your organization and will help to record the controls and treatments of those risk.

~Focuses on risk

No.	Main Process	Sub Process	Relevant Interested Parties		Needs / Expectations / Requirements	Issues (Strength / Weakness / Opportunity/ Threat)	Impact	Existing Control (Document Control No.)	Probability (Risks or Issues)	Severity (Impact)	Risk Priority No. (RPN)	
			Internal	External								
20	SLITTER	Cutting and creasing	EQOS, Diecut, Eterna, Vertical and Overhang		Exact quantity processed	Negative	Lack of quantity endorsed	- Delay / Balance delivery of item - Over inventory	Conduct counting during processing of item	1	2	2 (Low)
21	SLITTER	Cutting and creasing	EQOS, Diecut, Eterna, Vertical and Overhang		Correct item processed	Negative	- Wrong dimension - Wrong material used	- Wrong / Reject item - Additional cost - Possible delay delivery - Customer claim	Double check the Drawing vs. Job Order	1	2	2 (Low)
22	SLITTER	Cutting and creasing	EQOS, Diecut, Eterna, Vertical and Overhang									

## Environmental Aspect and Impact

~Designed to identify, control, manage and improve the significant aspects.

~Focuses on environment

## Hazard Identification Risk Assessment and Determining Controls (HIRADC)

~Identify all factors that may risk workers toward an accident, consider the possibility of hazards that may occur under any circumstances and conditions and enable workers to plan, introduce and monitor preventive measures against the risk of occupational injury

~Focuses on hazard

Department	Routine / Non-Routine	Activity / Task	Process / Steps	Machine / Tools / Chemical	Hazard (Hazard Characteristic)	Impact	Risk Assessment			Operational Control Measure	Risk Assessment		
							Severity	Likelihood	RPN		Severity	Likelihood	RPN
				Ink	Physical: Falling of container	- Spilling of ink	3	1	31	Administrative: Control proper storage of ink	1	2	12
					Physical: Spilling of ink	- Direct contact with chemical	3	3	33	Administrative: Put a secondary containment around the chemical storage area PPE: Chemical spill kit in the area	1	2	12
					Physical: Contact with sharp plastic files / metal	- Cut on insertion	3	2	32	Administrative: Spilling heavy container on floor PPE: Wearing of Safety gloves	1	2	12
				Cutter, Mjor, Cutter blade	Ergonomics: Repetitive motion	- Body Pain	3	2	32	Administrative: Overexposure on ergonomics exposure	1	2	12
					Physical: Contact with cutter blade	- Cut or insertion	3	2	32	Administrative: Wearing of Safety gloves	1	3	13

Aspects	Impacts
1. Use of natural resources	1. Depletion of natural resources
2. Use of land	2. Decrease in biodiversity
3. Emissions to air	3. Air pollution
4. Releases to water	4. Water pollution
5. Emitted energy	5. Noise pollution

# WHAT IS GLUING PROCESS?

## Gluing or Adhesive Bonding

- is the process of joining two surfaces together, usually with the creation of a smooth bond.
- This may involve the use of glue, epoxy, or one of a wide range of plastic agents which bond either through the evaporation of a solvent or through curing via heat, time, or pressure.

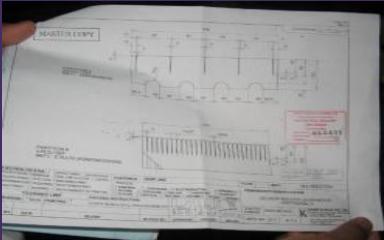
In KPPI, Gluing Process is the joining of two or more surfaces whether 1 joint, 2 joints or pads with the use of glue as an adhesive through the curing in machine or manual via pressure and time, respectively.

# MANUAL GLUING WORK INSTRUCTION

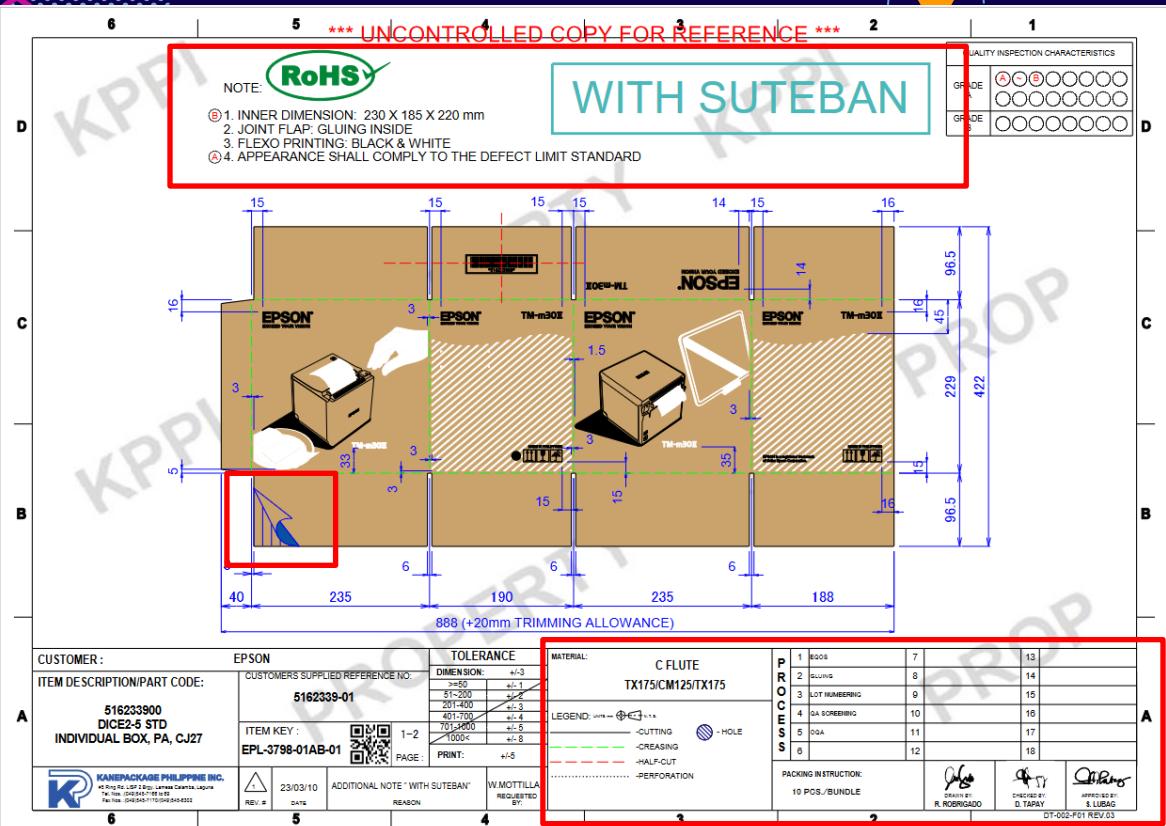
1. Perform checking using Daily Machine Check sheet then sign it and conduct machine cleaning before start of the shift. Check the Job Order (JO). The Job Order contains the customer and item to be processed including its quantity, how many raw materials you will be using and its delivery date.



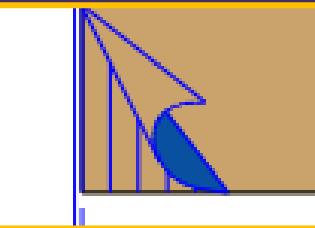
2. The drawing is attached with the JO where it illustrates the dimension, type of material and appearance of the item to be produced. The drawing is considered as "The Bible" of our people in the operations group. You must check the drawing and the Job Order if both state the same Customer, Item Description and type of material to be use. The standard unit of measurement used in KPPI is in millimeters (mm).



## GLUING REMINDERS



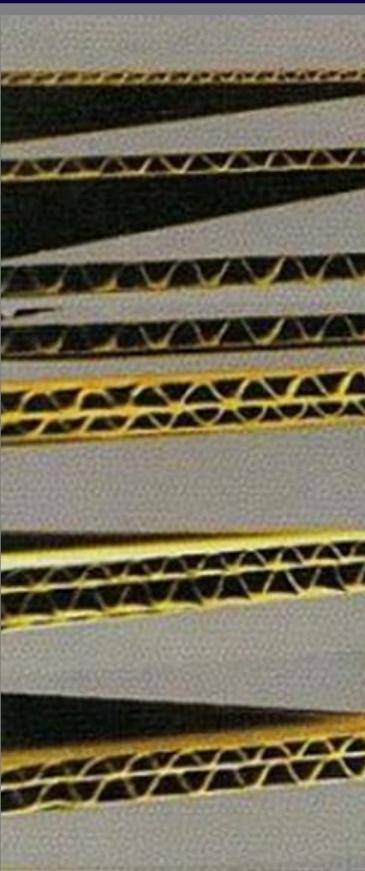
- ✓ Check the notes because other information was indicated here



- ✓ Make sure to consider the grain direction when reading the dimension.

- ✓ Check the tolerance, materials as well as the process if it is matched on the Job Order.

## TYPES OF MATERIALS



EF – 2MM

BF – 3MM

CF – 4MM

AF – 5MM

CBF – 7MM

ABF – 6MM

EBF – 5MM

## FUJI AND AKITA



- Both are NPK material but **Fuji** is more **yellowish** than Akita.
- Reminder, **Gluing Operator shall check material indicated in the J.O to verify if it conforms with the actual material from WHSE.**  
**For first process, check the J.O upon issuance of WHSE.**

# MANUAL GLUING WORK INSTRUCTION

## 3. For Items with One Joint

3.1 Fold the joint flap on the creasing line to make the gluing portion more visible. Arrange the materials for gluing by laying flat on the table. One flap on top of the creasing line. The flap must be facing the operator.

Note: Gluing operator shall immediately wipe out all excess glue that are not on glue tab portion using the provided clean rug. For all small carton boxes, the gluer and assembler shall be in separate location on the working table to avoid adhesion of glue on the items.



# MANUAL GLUING WORK INSTRUCTION

3.2 Follow the standard quantity of sheets per batch when applying the glue.

**11**

## STANDARD QTY PER FLUTE

ABF = 10-15 pcs. Maximum

CBF = 10 pcs. Maximum

AF = 15-20 pcs. Maximum

CF = 15-20 pcs. Maximum

BF = 20-25 pcs. Maximum

EF = 20-25 pcs. Maximum



# MANUAL GLUING WORK INSTRUCTION

## 3.3 For the right application of glue.



The correct application of glue are:

- Not thin nor thick
- All parts should be filled especially to the edge part of the glue tab



Based on the illustration, the other part of the glue tab is not filled with glue and the other part is too much. If that's the case, it can cause weak glue, glue stain and peel off.

## MANUAL GLUING WORK INSTRUCTION

3.4 Upon completion of the application of glue, the flap joints must be attached together and insert one by one to the conveyor. Proper alignment of the flap must be observed.

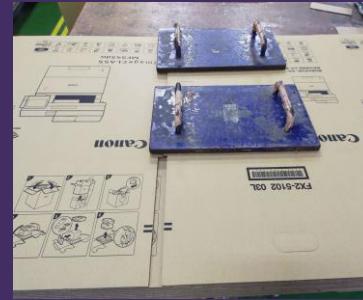
For the items of Overhang and EQOS, allow only 5-7mm distance from the creasing line while 2-3mm for Die-cutted.



## MANUAL GLUING WORK INSTRUCTION

3.4.1 Apply Weight Jig on the whole glue tab after 1st gluing. The position of the weight jig is horizontal to the item to accommodate all glued portions.

Note: TOTAL WEIGHT OF JIG = 30kg ( 2pcs of 15 kg weight jig) and for temporary holding weight jig is 6 kg.



3.4.2 Apply 1 piece of 6kg Weight jig for the 2nd gluing.



# MANUAL GLUING WORK INSTRUCTION

## Note:

1. Gluing operator shall strictly follow the curing time for drying which is minimum of five (5) minutes or the processing cycle time of the next batch. Refer to the matrix based on the conducted time study.
2. Operator shall not leave the process. If being left, there should be a weight jig of 30kgs (2 pcs of 15 kgs weight jig) placed on the item.

## ***Processing Cycle Time of Next Batch***

AF :	13 - 15 mins
CBF :	15 - 20 mins
CF :	13 - 15 mins
EF :	13 - 15 mins
BF :	13 - 15 mins

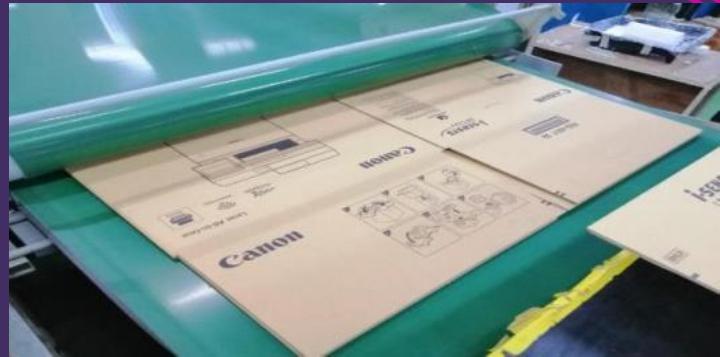
# MANUAL GLUING WORK INSTRUCTION

3.5 When inserting the box into the conveyor, please refer to the DO's and DON'Ts during operation.



## MANUAL GLUING WORK INSTRUCTION

Note: For feeding of Canon RSC box (as shown in the figure), bottom part of the box shall feed first to prevent unattached panels and leads to fast drying of glue.



# MANUAL GLUING WORK INSTRUCTION

## 4. For items with Two Joints

4.1 Check the materials for warping. If the materials are warped, segregate the affected quantity.

### 4.1.1 For panel with warp:

4.1.1.1 Sort each panel (A and B) separately by checking the identification mark and codes to avoid mixed-up.

4.1.1.2 After sorting, count the number of pieces (based on standard quantity per flute) of panel B and put on top of the gluing table.

4.1.1.3 Then count the number of pieces (based on standard quantity per flute) of panel A and put on the side of the gluing table.

4.1.1.4 Put glue on the panel B and attach the panel A.



# MANUAL GLUING WORK INSTRUCTION

## 4.1.2 If no issue of warping on panel:

4.1.2.1 Sort each panel (A and B) separately by checking the identification mark on glue tab and the code to avoid mixed-up.

4.1.2.2 After sorting, count the number of pieces (based on standard quantity per flute) of panel A and put on top of the gluing table.

4.1.2.3 Then count the number of pieces (based on standard quantity per flute) of panel B and put on the side of the gluing table.

4.1.2.4 Put glue on panel A and attach the panel B.

Note: Panel A should always be the first to be glued.



## MANUAL GLUING WORK INSTRUCTION

4.2 Check if there is an excess of each panel. If there is an excess on either panel, operator should immediately check/sort the affected batch.

Note: Checking on the item for 100pcs and below should be at first and middle of the process while 5pcs for every 100pcs with big quantity processed.

4.3 For every batch, operator should check one set before proceeding to another batch. Checkpoint should be for "double panels and mixed panels".

4.4 Repeat the process of counting the number of pieces (based on standard quantity per flute) per batch until quantity required is done.

# MANUAL GLUING WORK INSTRUCTION

4.5 After running the item in the conveyor, the following specification must be checked by the operator and QA Inspector.

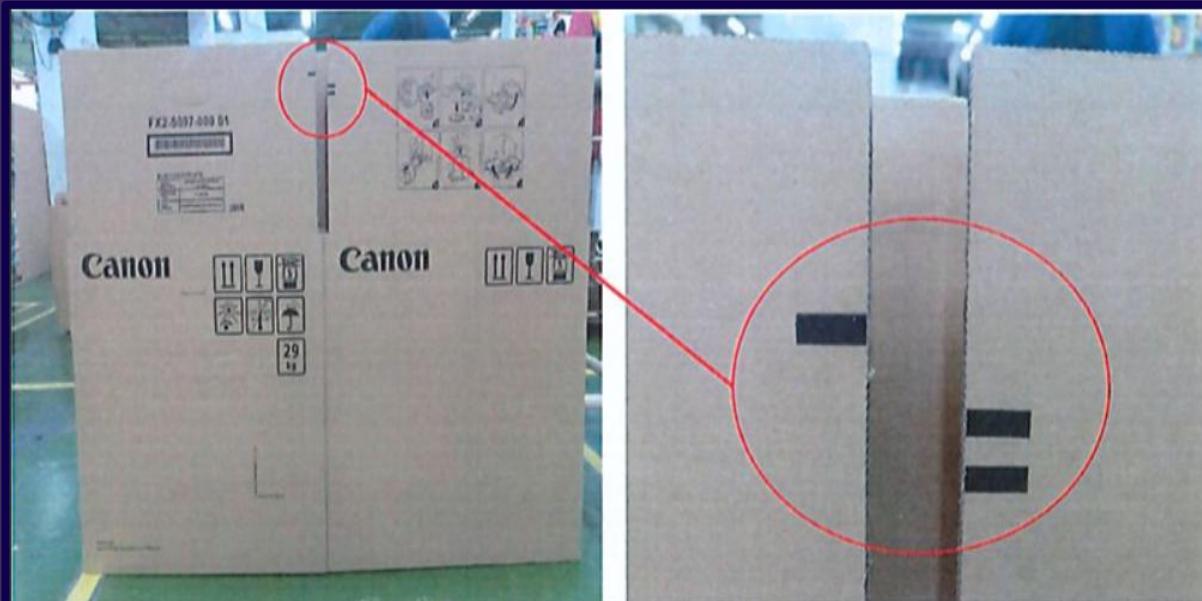
- a. No appearance of scattered glue
- b. Attaching of flap joint must be firm and aligned
- c. No weak glue
- d. No excess glue
- e. No scoring
- f. No dent mark
- g. No pressure mark
- i. Boxes are not adhering to one another

5. The item shall be bundled by Gluing Operator or QA (as indicated on JO). Refer to the drawing for bundling requirements.

Note: If glued boxes are not for immediate inspection or no available returnable box:

GLUING DEFECTS

# DOUBLE PANEL



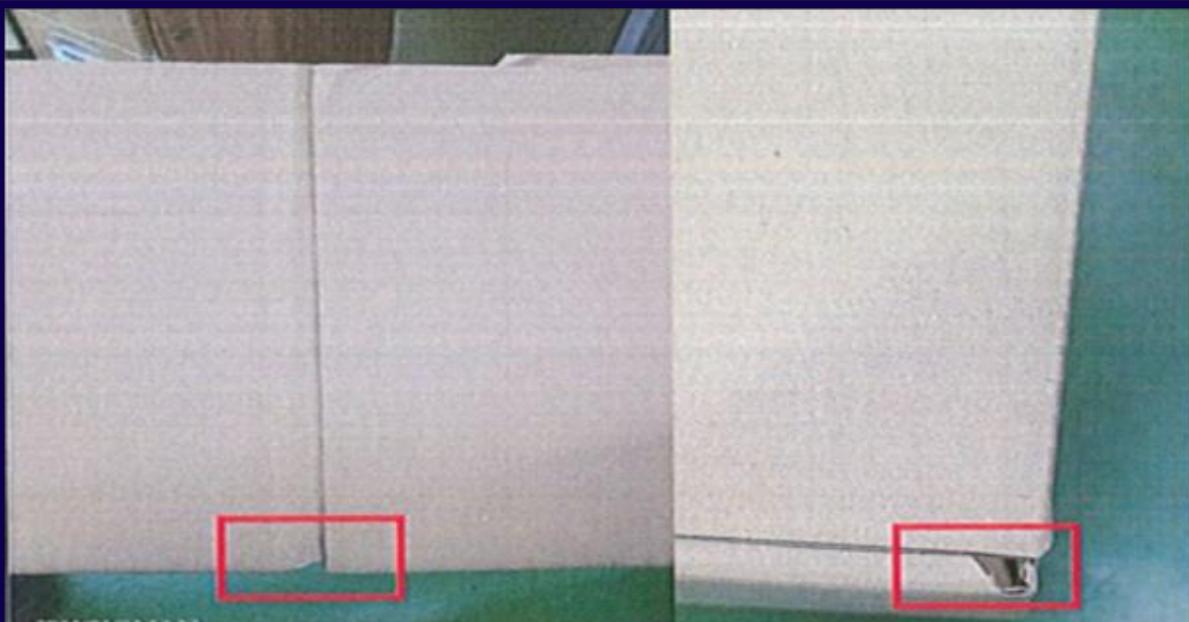
## GLUING DEFECTS

# CLOSE GAP



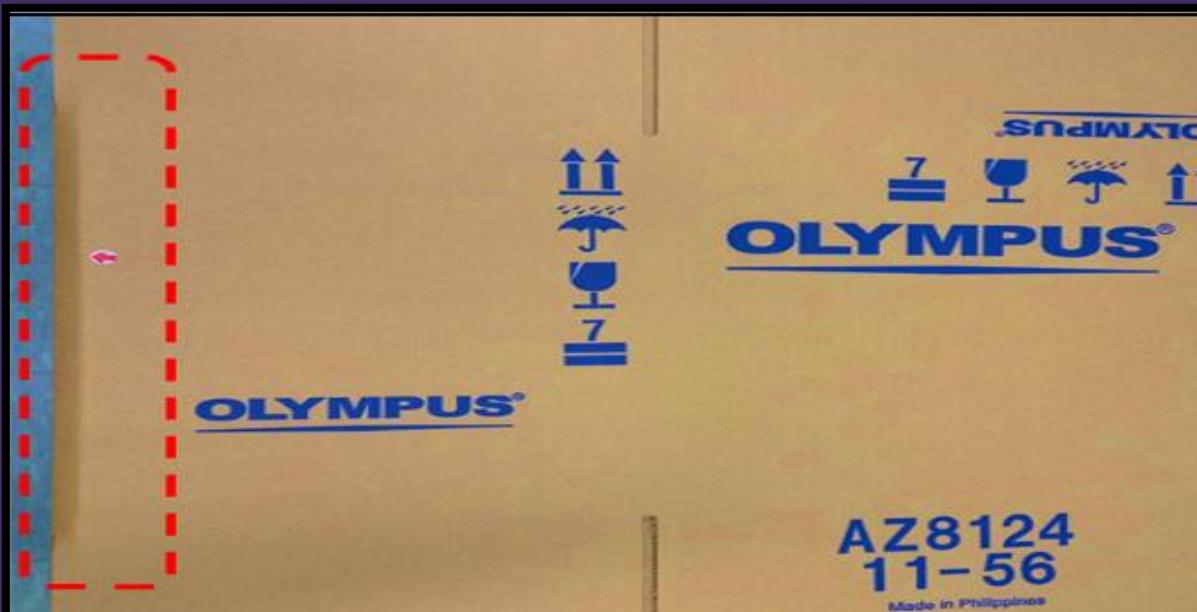
## GLUING DEFECTS

# WIDE GAP



GLUING DEFECTS

# EXTRA FOLD

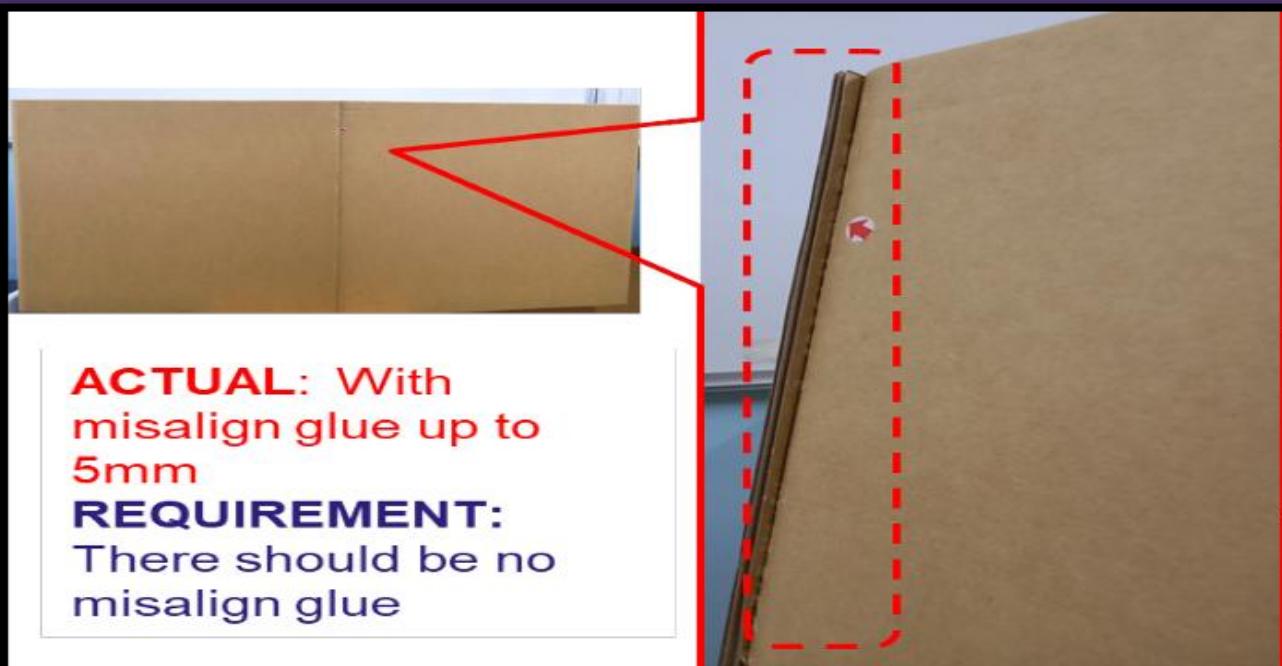


## GLUING DEFECTS

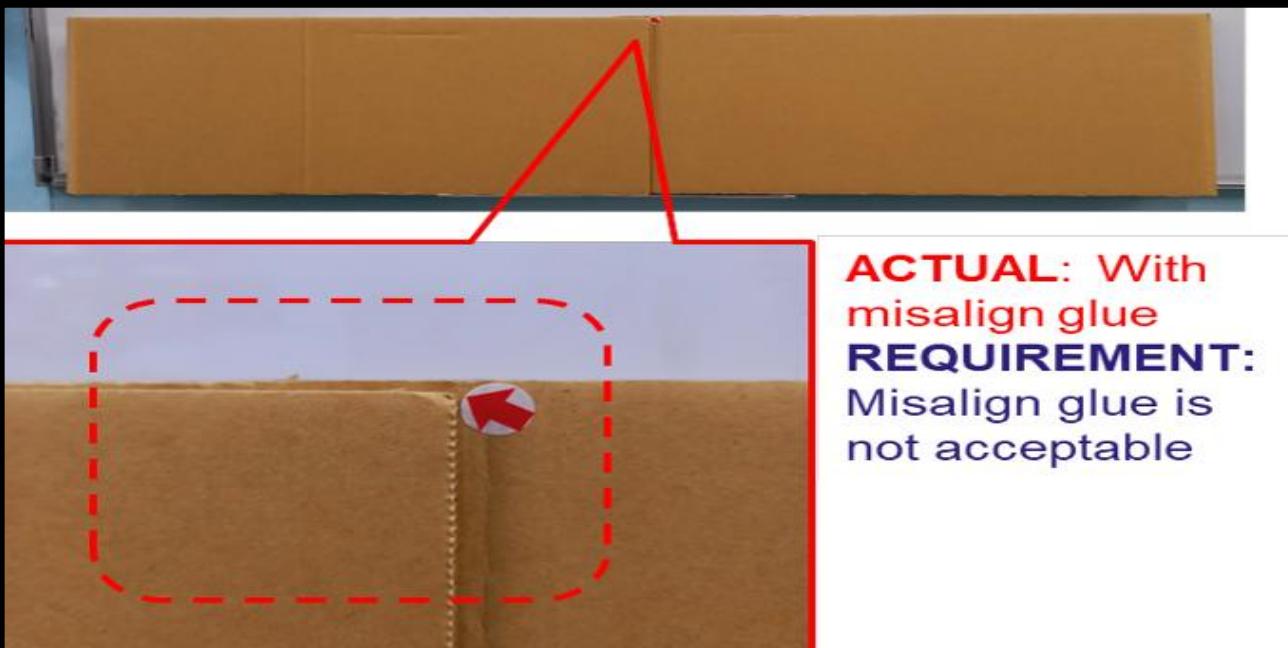
# GLUE STAIN



# OVERLAP



# MISALIGN GLUE



**ACTUAL:** With misalign glue

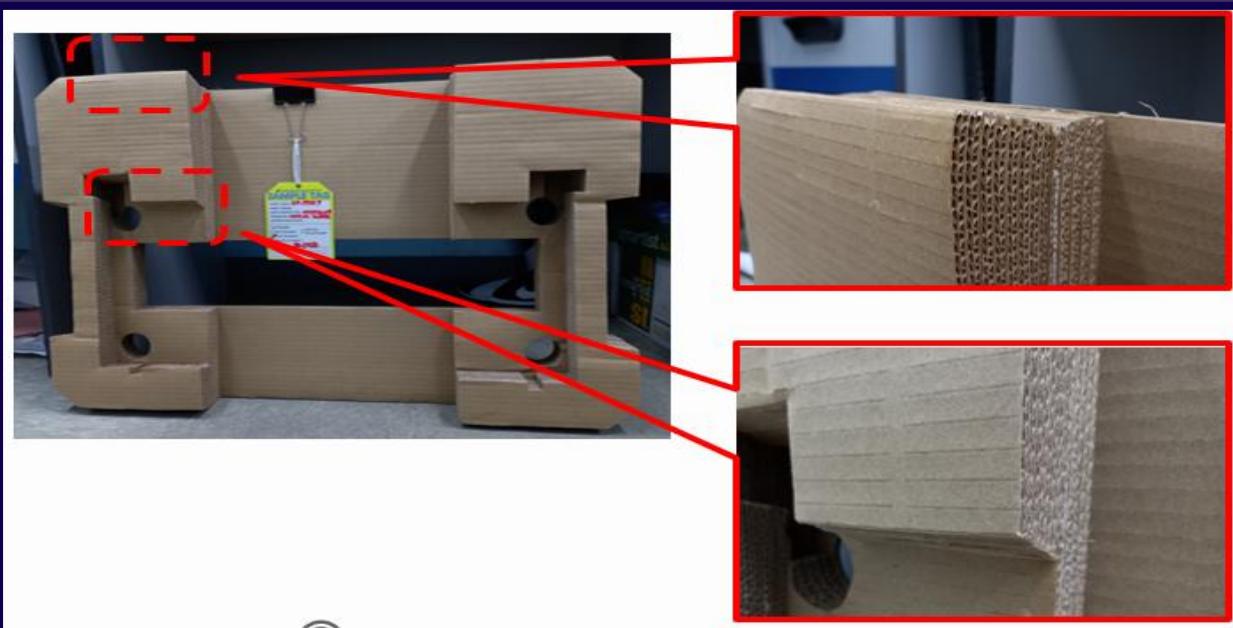
**REQUIREMENT:**  
Misalign glue is not acceptable

## GLUING DEFECTS

# MISALIGN GLUE

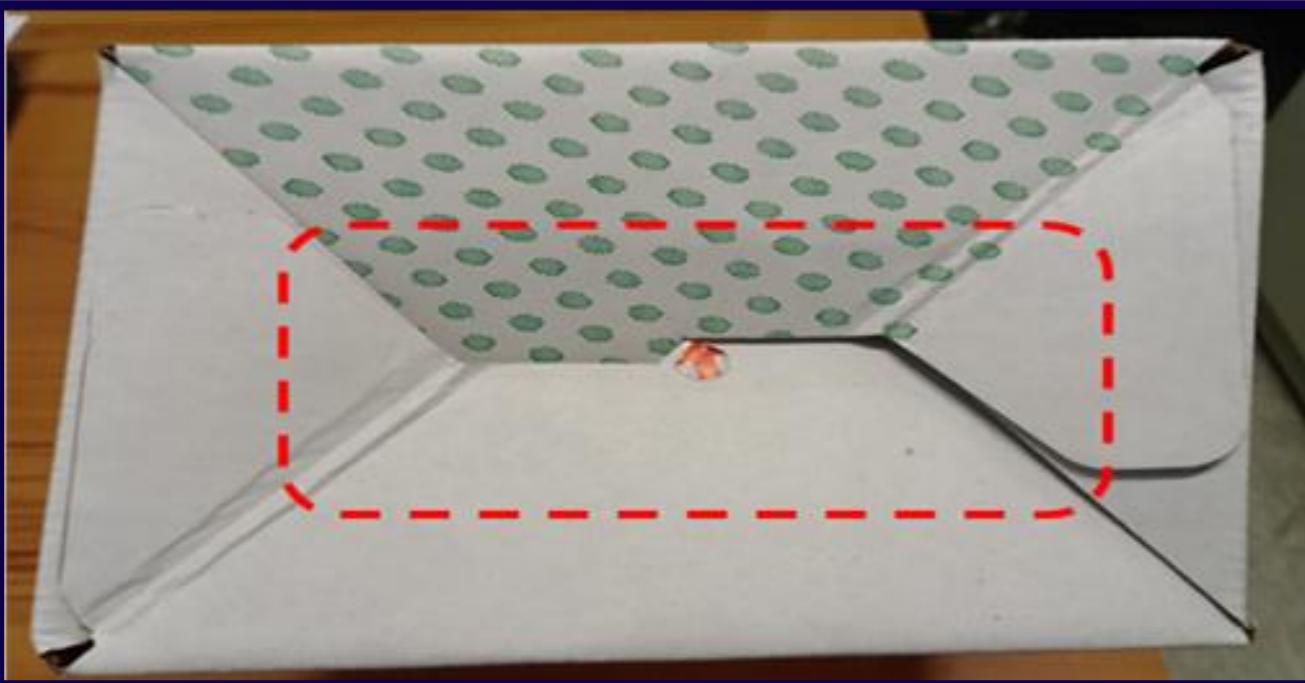


# MISALIGN GLUE (PADS)



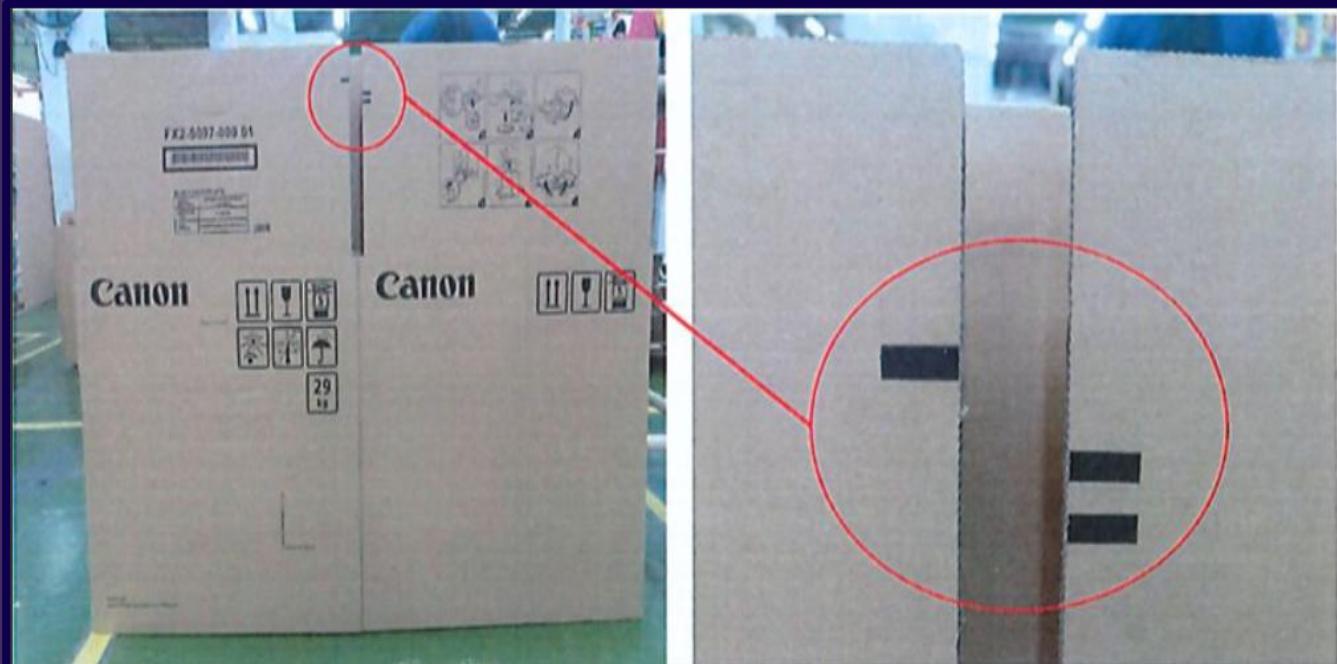
GLUING DEFECTS

# CANNOT FIT LOCK



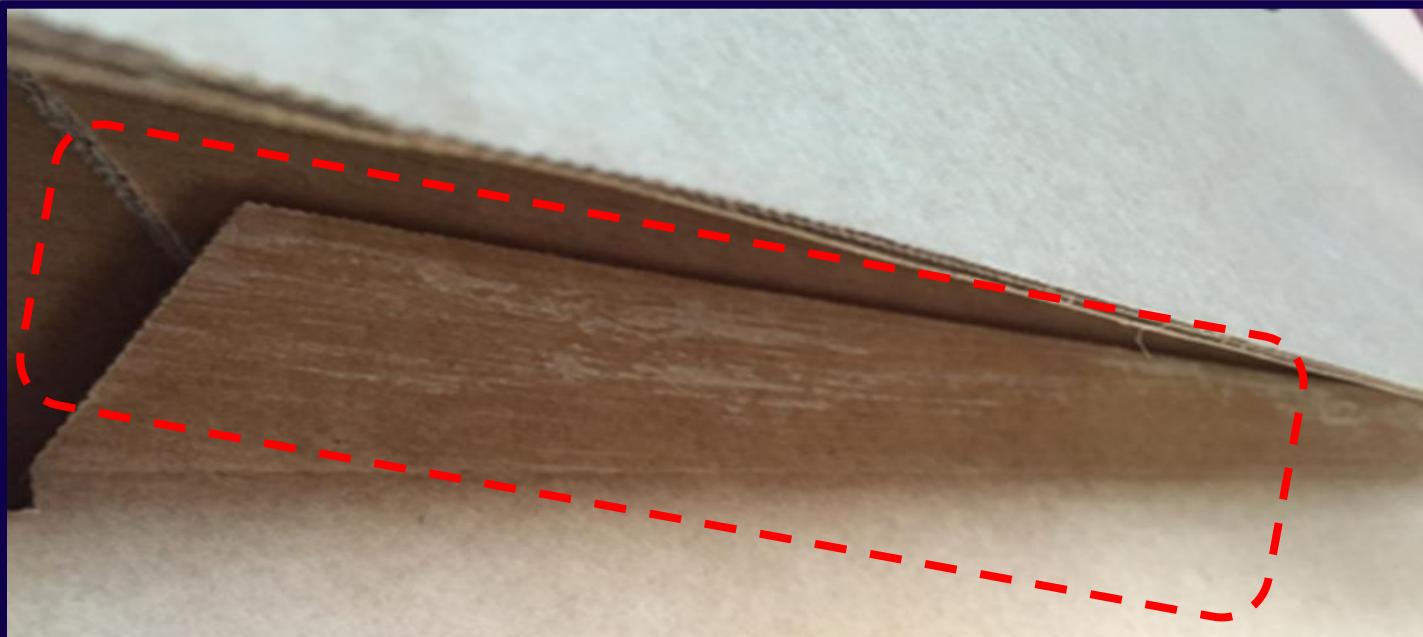
GLUING DEFECTS

# DOUBLE PANEL



GLUING DEFECTS

# WEAK GLUE



# MANUAL GLUING WORK INSTRUCTION

1. CB Flute, One joint - items for inspection shall be stacked one by one facing alternately by the gluing operators on pallet after gluing process.



2. CB Flute, Two joint - items for inspection shall be stacked with eperan spacer between each box by the gluing operator. QA inspector/ line leader shall be informed immediately by Production before running or processing the item for the eperan spacer requisition of QA to Production.

# MANUAL GLUING WORK INSTRUCTION

6. Items with detected rejects shall be segregated for endorsement to Rejects and Reworks (R&R) Staff. Rejection Notice shall be accomplished with all the required information such material/item information, details of detected defects, endorsing personnel, etc.)

**Rejection Notice has four (4) copies:**

REJECTION NOTICE					
Customer:			Date:		
Item Description:	Item Code:	Customer:	Job Order No.:	D.R. No.:	Date:
External Provider:	Lot Quantity:	Nature of Defects	Quantity	Nature of Defects	Quantity
EXTERNAL PROVIDER					
IN-HOUSE					
2nd HOUSE					
Prepared by:	Department / Section:	Approved by:	Received by:	Disposition:	
Signature over printed name:		Signature over printed name:		<input type="checkbox"/> For Backload <input type="checkbox"/> For Disposal	
Technical Report No.:		Remarks:			

**White**

**QA Copy**

REJECTION NOTICE					
Customer:			Date:		
Item Description:	Item Code:	Customer:	Job Order No.:	D.R. No.:	Date:
External Provider:	Lot Quantity:	Nature of Defects	Quantity	Nature of Defects	Quantity
EXTERNAL PROVIDER					
IN-HOUSE					
2nd HOUSE					
Prepared by:	Department / Section:	Approved by:	Received by:	Disposition:	
Signature over printed name:		Signature over printed name:		<input type="checkbox"/> For Backload <input type="checkbox"/> For Disposal	
Technical Report No.:		Remarks:			

**Green**

**Production Copy**

REJECTION NOTICE					
Customer:			Date:		
Item Description:	Item Code:	Customer:	Job Order No.:	D.R. No.:	Date:
External Provider:	Lot Quantity:	Nature of Defects	Quantity	Nature of Defects	Quantity
EXTERNAL PROVIDER					
IN-HOUSE					
2nd HOUSE					
Prepared by:	Department / Section:	Approved by:	Received by:	Disposition:	
Signature over printed name:		Signature over printed name:		<input type="checkbox"/> For Backload <input type="checkbox"/> For Disposal	
Technical Report No.:		Remarks:			

**Pink**

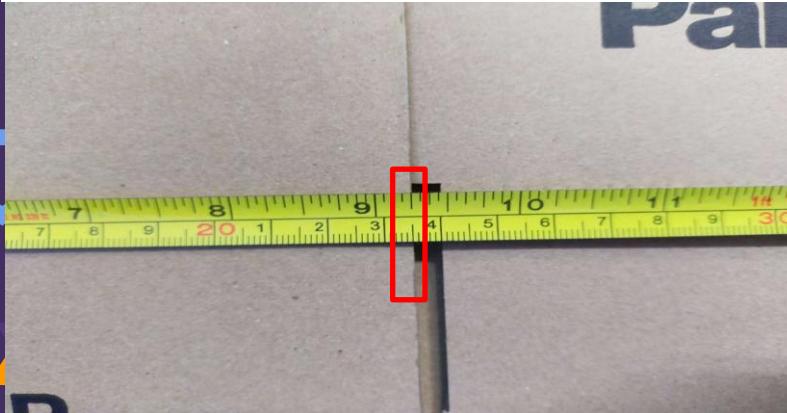
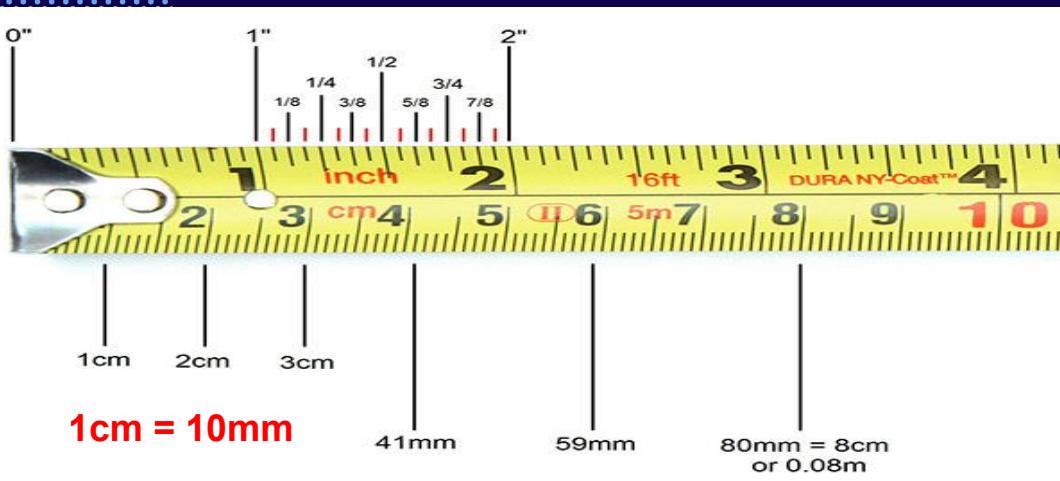
**Actual Item Copy**

REJECTION NOTICE					
Customer:			Date:		
Item Description:	Item Code:	Customer:	Job Order No.:	D.R. No.:	Date:
External Provider:	Lot Quantity:	Nature of Defects	Quantity	Nature of Defects	Quantity
EXTERNAL PROVIDER					
IN-HOUSE					
2nd HOUSE					
Prepared by:	Department / Section:	Approved by:	Received by:	Disposition:	
Signature over printed name:		Signature over printed name:		<input type="checkbox"/> For Backload <input type="checkbox"/> For Disposal	
Technical Report No.:		Remarks:			

**Blue**

**Job order Copy**

## USE OF METER TAPE



What is the measurement of the cutting?

**Answer: 23.5cm = 235mm**

# GLUING REMINDERS

## GUIDELINES FOR VISUAL REFERENCE TO ELIMINATE DOUBLE PANEL



ALWAYS CHECK THE ALIGNMENT OF POKAYOKE  
MARK DURING GLUE APPLICATION

# GLUING REMINDERS

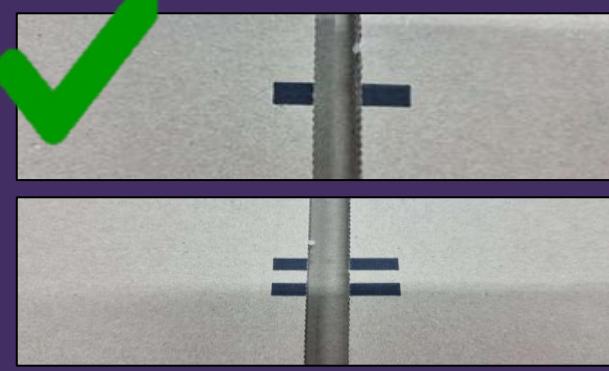
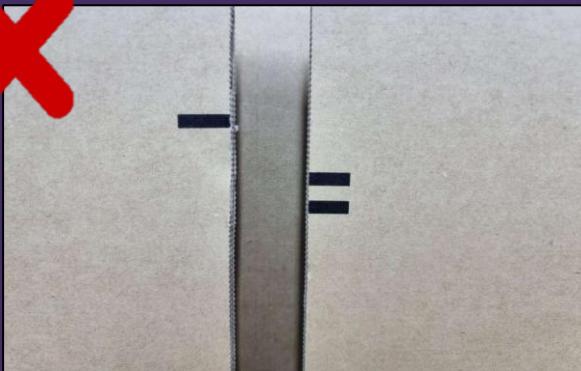
## GUIDELINES FOR VISUAL REFERENCE TO ELIMINATE DOUBLE PANEL



**ALWAYS FOLLOW THE 10 SETS PER BATCH  
STANDARD**

# GLUING REMINDERS

## GUIDELINES FOR VISUAL REFERENCE TO ELIMINATE DOUBLE PANEL



ALWAYS CHECK THE POKAYOKE EYE MARK

# GLUING REMINDERS

## GUIDELINES FOR PROCESSING 2ND GLUING OF EMORI HP01D2200C-1 AND HP01D2000-3



1. Apply just a thin layer of glue in the gluing portion of the item.
2. Make sure to fill all the gluing portion of glue.



1. Avoid thick application of glue.
2. Make sure that no sticking glue will be left.

## GLUING REMINDERS

- Manual Gluing vs. Conveyor items
  - 1. Manual Gluing items should be recorded in the Daily Individual Output
- Proper recording of data
  - 1. Complete
  - 2. Clear
  - 3. Include the type of item (1 Joint, 2 Joints, Pads)
- **NOTE: AVOID CHEATING**
- Output
- Maintain the implementations/improvements
- Downtime and unnecessary downtime
- Rejects which can lead to issuance of CAR

## GLUING REMINDERS

### STANDARD PALLETIZING

#### EMORI ITEMS

Item Code	Desc	Category	Whse remarks
HP01D2200C-1	CARTON BOX	RM	Request to standardized SPM @ 800/pallet
HP01D2000-3	OUTER BOX	RM	
HP33D1027-1	OUTER BOX	RM	
HP33D1014-2	BOX CASE WITH PRINT	RM	

- Proposed new quantity per pallet c/o Leaders is on-going.

## USE OF SCANNER



Barcode scanner shall be used to scan the Job Order before giving to Warehouse for material issuance.

Likewise, Warehouse will scan the J.O upon receiving from Production.

Before processing, Job Order shall be scanned first, and the initial quantity shall be input in the barcode scanner. Likewise, J.O shall be scanned again after processing and input the final quantity of the produced item.

# HANDHOLE ORIENTATION

PREPARED BY:  
JUDY SARMIENTO

# HANDHOLE WORK INSTRUCTION

1. Perform the Preventive Maintenance of the Handhole Machine and update the Daily Machine Checklist at the start of every shift.
2. Check the Job Order. The Job Order is consisting of customer's name, the item description, quantity and delivery date. It also includes the type and quantity of the materials to be used in production.
3. Set the Handhole Machine according to drawing's specification and dimension of the item. Machine should be in its OFF state.
4. Turn the Handhole Machine ON and put the item under the handhole cutter . Step on the Foot Pedal several times to make a hole. Check if the item is thoroughly cut.
5. Turn the Handhole Machine ON and put the item under the handhole cutter . Step on the Foot Pedal several times to make a hole. Check if the item is thoroughly cut.

**REMEMBER:** Always place your finger away from the handhole cutter to prevent injuries.

## HANDHOLE WORK INSTRUCTION

6. Let the QA inspector check the item if it conforms with the drawing. If the first trial is rejected, make another trial until the inspector approved it.
7. Fill up the trial run section of the JO according to standard trial run per quantity.
8. Commence with the process. Fill up the JO and Production Schedule of the day.
9. Always remember to turn the machine OFF after processing the item and when not in use.
10. Rejected items shall be segregated then a Rejection Notice shall be accomplished. The said Rejection Notice tag shall place together with the rejected items then endorse it to QA.

# SAFETY REMINDERS

## A. PPE Requirement

- >> Safety Shoes
- >> Earplugs (when using Handhole)

## B. General Safety Reminders

- >> Report any incident, accident, or near miss.
- >> Observe proper hygiene during break time and after work.
- >> Know the emergency stop button.
- >> Make to turned off the machine before doing any cleaning or maintenance.

## C. In Case of Emergency

- >> Immediately inform supervisor.
- >> Immediately press the emergency stop button.
- >> Immediately inform Health Team in case of injury-related emergencies.
- >> Immediately inform ERT/Safety Team in case of fire-related emergencies.

## D. Environment

- >> Always follow the waste segregation scheme (corrugated, plastic, eperan, hazardous).
- >> Always observe energy conservation - Turn-off light, machine, electric fan, etc. when not in use.

Thank You &  
God Bless! 😊