Hemtack

ENGINEERING CHANGE ORDER

REQUEST DATE	8/13/2021	REQUESTED BY	J. MAJLI JAUREGUI	REQUESTED RELEASE DATE	8/20/2021	ECO #	ECO-00037
AFFECTED PRODUCT LINES	**953 AND 958 WOVEN WOOD 48" W, 60" W AND 72" W ONLY**						
REASON FOR CHANGE	DESIGN AND PROCESS IMPROVEMENT TO ELIMINATE ROUTING OPERATION IN THE SPECIFIED WIDTH RANGES						
DESCRIPTION OF CHANGE	CHANGE SPECIFICATION FOR SLOT POSITION IN WOVEN WOOD HEADRAILS TO ELIMINATE THE NEED TO PERFORM ADDITIONAL ROUTING OPERATIONS						
COST IMPACT	**N/A**						

DOCUMENT / PART NUMBER	OLD REV	NEW REV	DOCUMENT/ PART DESCRIPTION	CHANGE DESCRIPTION	FORM, FIT, OR FUNCTION AFFECTED Yes, or No	PART DISPOSITION (USE AS IS) (REWORK) (SCRAP) (OBSOLETE) (RETURN TO VENDOR) (OTHER)
ENGREP_047	N/A	1	ENGINEERING REPORT - IMPROVED HR DESIGN SLOT POSITION FOR 953/958	**ENGINEERING REPORT RELEASE** SEE PAGE 3 - 6	NO	N/A

ADDITIONAL INFORMATION	

AFFECTED DOCUMENTS / PROCESSES (CHECK ALL THAT APPLY)

BOM / CONFIG	☐	PRODUCT / PART SPEC	☒	QC CHECKLIST	☒	PART DRAWING	☒	ASSEMBLY DRAWING	☐	INSTR SHEET	☒	PROCESS VISUAL AIDS	☒	WORK INSTRUCTIONS	☒

ECO APPROVALS ROUTING

APPROVER	APPROVAL REQUIRED	APPROVER NAME	APPROVAL STATUS	APPROVED ON	NOTES
PHASE II MANAGEMENT (US - DL)	☒	T. DAVIDSON	APPROVED	08/16/2021	
PHASE II PROD DEV (US - NY)	☒	L. HUNT	APPROVED	08/19/2021	
MANAGEMENT (MX)	☒	L. MONTEJO	APPROVED	08/19/2021	
QC / ENG (MX)	☒	H. AMEZQUITA	APPROVED	08/13/2021	
IT (MX)	☒	E. CASTELLANOS	APPROVED	08/13/2021	
PRODUCTION (MX)	☐				
MATERIALS (MX)	☐				

ACTIONS REQUIRED

BOM / CONFIG	☐	WILL BE MODIFIED BY IT (MX)
PRODUCT / PART SPEC	☒	WILL BE MODIFIED QC / ENG (MX)
QC CHECKLIST	☒	WILL BE MODIFIED QC / ENG (MX)
PART DRAWING	☒	WILL BE MODIFIED QC / ENG (MX)
ASSEMBLY DRAWING	☐	WILL BE MODIFIED QC / ENG (MX)
INSTR SHEET	☒	WILL BE MODIFIED QC / ENG (MX)
PROCESS VISUAL AIDS	☒	WILL BE MODIFIED QC / ENG (MX)
WORK INSTRUCTIONS	☒	WILL BE MODIFIED QC / ENG (MX)

PICTURES, DRAWINGS, ETC.

ENGINEERING REPORT

REPORT TITLE:	IMPROVED HR DESIGN SLOT POSITION FOR 953/958	**REPORT DATE:**	08/13/2021
REPORT NUMBER:	ENGREP 047	**CREATED BY:**	J. Majli Jauregui Ruiz
QA & ENGINEERING APPROVAL	**CC:**		
Hugo Amezquita	Lulu Montejo, Lee Hunt, Marcos Chang, Hugo Amezquita.		

1. Background:

Based on an improvement proposal, a design change was requested with the objective of eliminating the need to perform the slot routing operation in the MTM production area. The proposal considers a specification change in regards of the location of the slots at each end of the woven wood shades headrail.

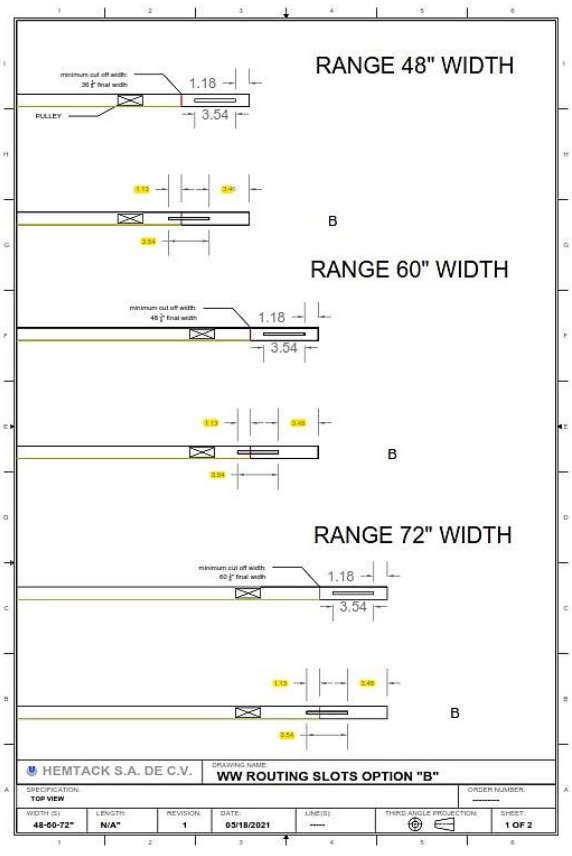

Figure. 1 DESIGN CHANGE PROPOSAL.

2. Analysis:

- During the inspection of the six samples provided by the manufacturer, we found that the new specification of the slot location was 3.5" from each end the head. This is in accordance to our design change proposal.

SAMPLE #	SKU	OPTION	SIZE (INCH) W	SIZE (INCH) L	COLOR
1	953	B	48	72	131
2	958		48		
3	953		60		
4	958		60		
5	953		72		
6	958		72		

Table 1. SAMPLE SCHEME FOR CUTTING TESTS, Option B.

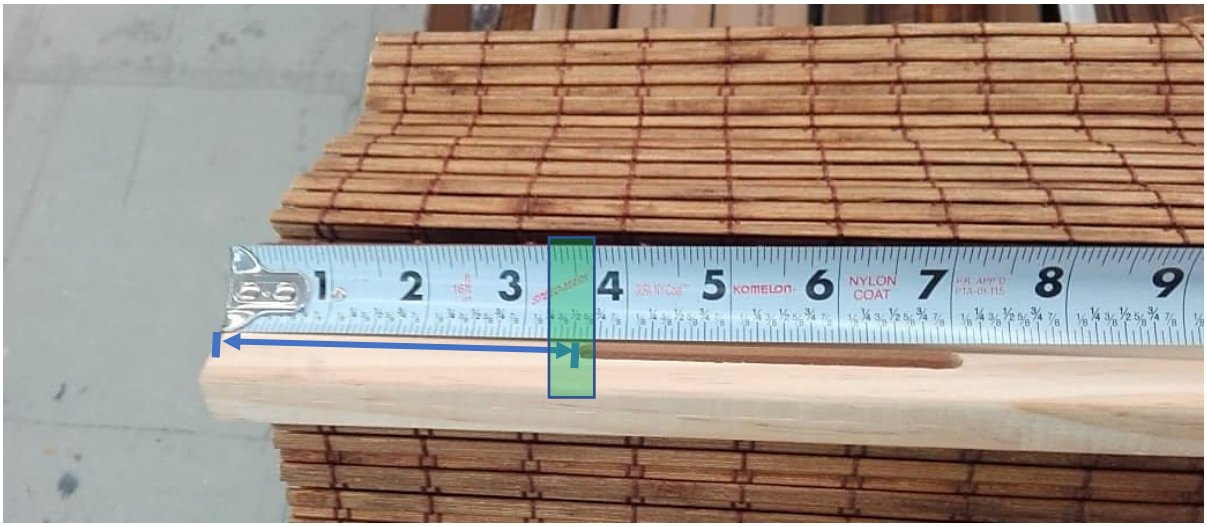

Figure. 2

CURRENT HEADRAIL DESIGN

- Specification of the current design for the 48”, 60” and 72” headrail, certain width adjustment end up requiring to perform the routing operation to redo the slots, mainly because the adjustments can go up to 5 ¾” and the slot is located around 1 ¼” inwards at each end (see image 3, 4 and 5).

Figure. 3 Reveal after cutting the fabric trim on each side.

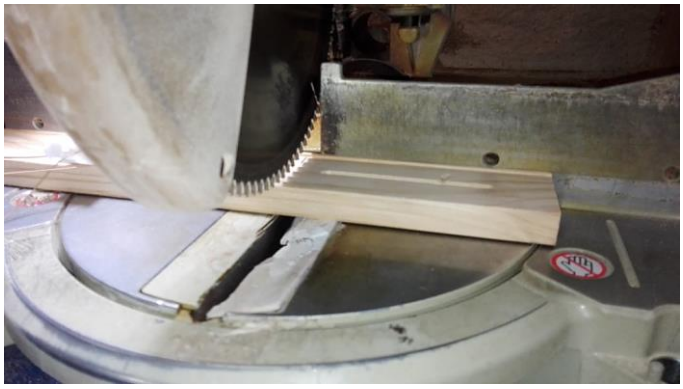

Figure. 4 Cutting action on the width of the fabric.

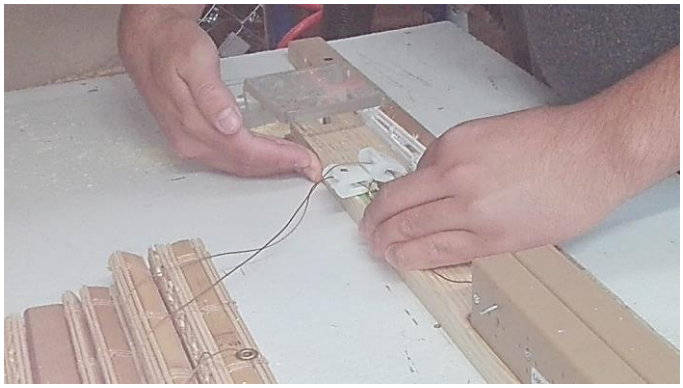

Figure. 5 Rework to recompose the slots to make assembly possible.

IMPROVED HEADRAIL DESIGN

After performing the headrail cutoff operation, we can see that the slot still runs about 1 1/8” which is sufficient to allow for installation of the mounting hardware (brackets). No additional routing is required to extend the slots.

Figure. 6 Fabric adjustment to the maximum possible based on the width ranges.

3. Conclusión:

- The improvement proposal yield a signifcant benefit since we are eliminating the need to perform additional labor to redo the slots with the router. An approximate of 20 seconds are eliminated by this change. Also, we are avoiding a risk of injury and an operation that requires a skilled operator.
- An approximante 30 square feet of production space can be optimized.

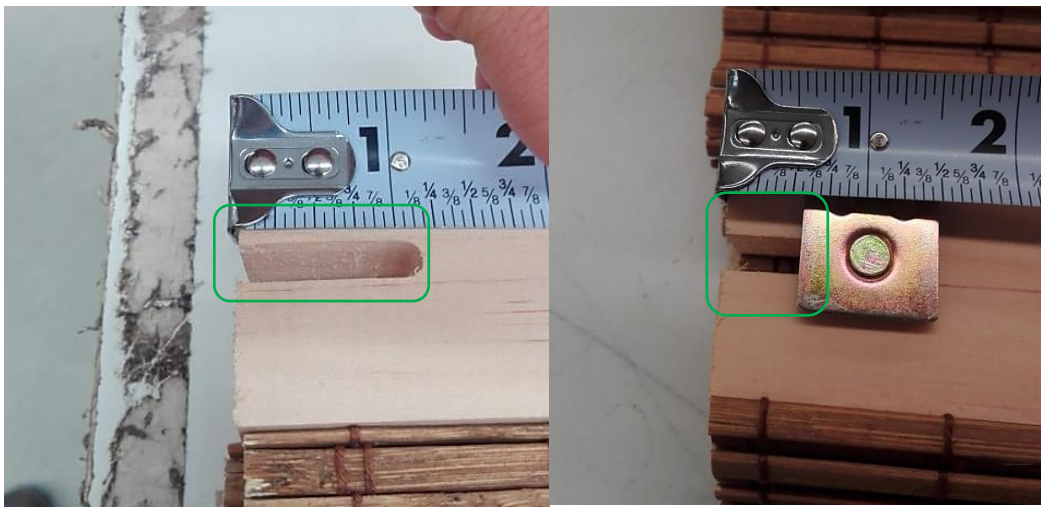

Figure. 7 left side end view of the slot, right side example of the positioning at the ends.

- As shown in figure 7, there is no inteference with the position of the mounting hardware (bracket) and the returns in the case of outside mount shades.
- The formal change request will be submitted through an Engineering Change Order.