PANEL OPTIMIZATION REPORT - MAXRECTS ALGORITHM

Customer: Paul Revere

Date: 09/07/2025

Job: Revere Kitchen Remodel (#231)

Door Style: #231

OPTIMIZATION SUMMARY

2	15	36.9%
TOTAL SHEETS	PANELS CUT	AVG EFFICIENCY

MATERIAL BREAKDOWN

Material	Sheets Required	Total Area Used	Efficiency	Waste (sq ft)
White Oak	1	13.1 sq ft	41.0%	18.9
Paint Grade	1	10.5 sq ft	32.7%	21.5

Algorithm: Maxrects with Best Area Fit
This advanced algorithm maintains maximal free rectangles for optimal placement. Features enabled: Panel rotation (when grain allows), gap filling, waste tracking.

Settings:

- Kerf (blade width): 0.125"
- Sheet size: 48.0" x 96.0"
- Rotation enabled: False
- Minimum waste size to track: 6" x 6"

SHEET #1 - White Oak

Sheet Size: 48.0" x 96.0"

Material Usage: 41.0% (LOW)

Panels on Sheet: 6

Waste: 18.87 sq ft

CUTTING DIAGRAM

| 7-1 10 7/8" x 36 1/4" | 7-2 10 7/8" x 36 1/4" | 6-1 8 3/16" x 19 1/8" |
| 8-1 10 7/8" x 36 1/4" | 8-2 10 7/8" x 36 1/4" | 6-2 8 3/16" x 19 1/8" |

41.0%

CUTTING INSTRUCTIONS

-> Cabinet #7: 10 7/8" x 36 1/4"

1. 1. Cross-cut at 10 7/8" from left edge

-> Cabinet #8: 10 7/8" x 36 1/4"

2. 2. Rip at 36 3/16" from bottom edge

-> Cabinet #7: 10 7/8" x 36 1/4"

3. 3. Cross-cut at 10 7/8" from left edge

-> Cabinet #8: 10 7/8" x 36 1/4"

4. 4. Rip at 72 1/2" from bottom edge

-> Cabinet #6: 8 3/16" x 19 1/8"

5. 5. Cross-cut at 8 3/16" from left edge

-> Cabinet #6: 8 3/16" x 19 1/8"

Sheet efficiency: 41.0%

Usable waste pieces: 2

- (Save for drawer bottoms or small parts)
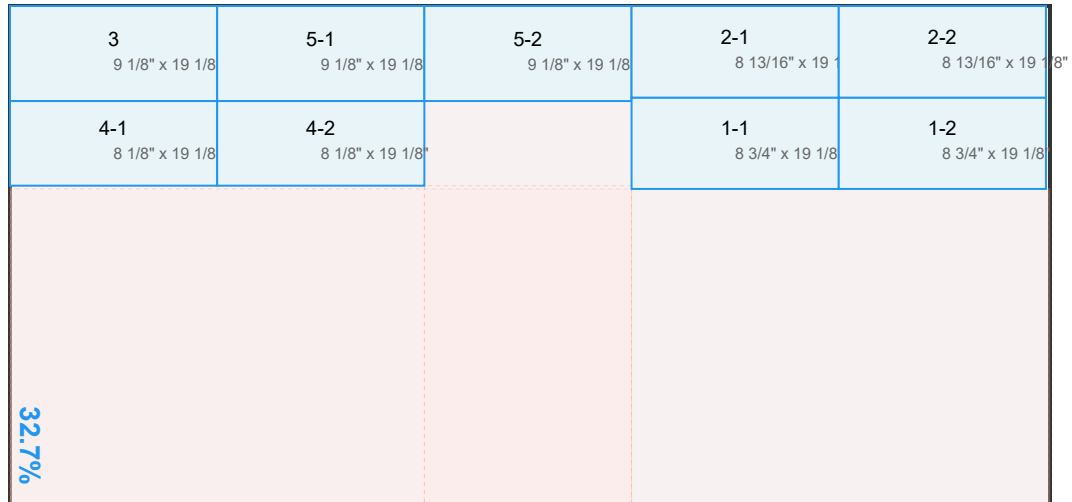
SHEET #2 - Paint Grade

Sheet Size: 48.0" x 96.0"

Material Usage: 32.7% (LOW)

Panels on Sheet: 9

Waste: 21.54 sq ft

CUTTING DIAGRAM

3	5-1	5-2	2-1	2-2
9 1/8" x 19 1/8	9 1/8" x 19 1/8	9 1/8" x 19 1/8	8 13/16" x 19 1	8 13/16" x 19 1/8"

4-1	4-2		1-1	1-2
8 1/8" x 19 1/8	8 1/8" x 19 1/8"		8 3/4" x 19 1/8	8 3/4" x 19 1/8

32.7%

CUTTING INSTRUCTIONS

-> Cabinet #3: 9 1/8" x 19 1/8"

1. 1. Cross-cut at 9 1/8" from left edge

-> Cabinet #4: 8 1/8" x 19 1/8"

2. 2. Rip at 19 1/8" from bottom edge

-> Cabinet #5: 9 1/8" x 19 1/8"

3. 3. Cross-cut at 9 1/8" from left edge

-> Cabinet #4: 8 1/8" x 19 1/8"

4. 4. Rip at 38 3/16" from bottom edge

-> Cabinet #5: 9 1/8" x 19 1/8"

5. 5. Rip at 57 3/8" from bottom edge

-> Cabinet #2: 8 13/16" x 19 1/8"

6. 6. Cross-cut at 8 13/16" from left edge

-> Cabinet #1: 8 3/4" x 19 1/8"

7. 7. Rip at 76 1/2" from bottom edge

-> Cabinet #2: 8 13/16" x 19 1/8"

8. 8. Cross-cut at 8 13/16" from left edge

-> Cabinet #1: 8 3/4" x 19 1/8"

Sheet efficiency: 32.7%

Usable waste pieces: 3

- (Save for drawer bottoms or small parts)