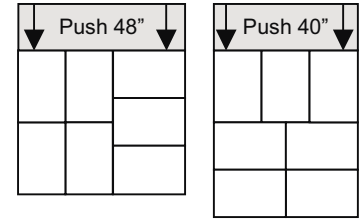




# Simplified Layer Programming

Top Tier has the easiest layer programming method in industry. Operator can enter a new layer pattern by following the simple instructions below.

1. Determine the direction the pallet will be constructed.
2. Most palletizers will be set up to consistently construct pallets in the wide or narrow orientation.
3. In the wide orientation, a 48" row is pushed and a 40" row is pushed in the narrow orientation.
4. In the sample, the 48" push will require two row stops to properly position cases and allow pushes without conflicts. The 40" push will not require a row stop.
5. Break the layer pattern into rows. Each of the samples will require three pushes to complete a layer.
6. Number the cases as they will enter the palletizer as shown below. Case flow direction



Red lines are stop 1, Green lines are stop 2

48" push, Odd Layer						40" push, Odd Layer									
Push 1		Push 2		Push 3		Push 1		Push 2		Push 3					
3	2	1		4		7	6	5	3	2	1	5	4	7	6
48" push, Even Layer						40" push, Even Layer									
Push 1		Push 2		Push 3		Push 1		Push 2		Push 3					
3	2	1	4	7	6	5	2	1	4	3	7	6	5		

TOP TIER PALLETIZERS PALLET CONFIGURATION WORKSHEET									TOP TIER PALLETIZERS PALLET CONFIGURATION WORKSHEET								
PATTERN		Insert Pattern Name, Alpha or #							PATTERN		Insert Pattern Name, Alpha or #						
PLACE AN 'X' OR VALUE IN THE DESIRED SQUARES. LEAVE ALL OTHERS BLANK. FILL IN ONLY ODD LAYER INFORMATION FOR NON-INTERLOCKING PATTERNS.									PLACE AN 'X' OR VALUE IN THE DESIRED SQUARES. LEAVE ALL OTHERS BLANK. FILL IN ONLY ODD LAYER INFORMATION FOR NON-INTERLOCKING PATTERNS.								
TOTAL NUMBER OF LAYERS ON PALLET INTERLOCKING PATTERN									TOTAL NUMBER OF LAYERS ON PALLET INTERLOCKING PATTERN								
8									8								
1									1								
ODD LAYERS	RECIPE VALUE	TURN BOX	LAST BOX IN ROW	LAST BOX IN LAYER	STOP AT POSITION 1	STOP AT POSITION 2	STOP AT POSITION 3	STOP AT POSITION 4	ODD LAYERS	RECIPE VALUE	TURN BOX	LAST BOX IN ROW	LAST BOX IN LAYER	STOP AT POSITION 1	STOP AT POSITION 2	STOP AT POSITION 3	STOP AT POSITION 4
BOX 1	256								BOX 1	1	x						
BOX 2	265	x			x				BOX 2	513	x						
BOX 3	4611	x	x						BOX 3	3	x	x					
BOX 4	4610		x						BOX 4	512							
BOX 5	256								BOX 5	258		x					
BOX 6	265	x			x				BOX 6	256							
BOX 7	5639	x	x	x					BOX 7	1798		x	x				
EVEN LAYERS		TURN BOX	LAST BOX IN ROW	LAST BOX IN LAYER	STOP AT POSITION 1	STOP AT POSITION 2	STOP AT POSITION 3	STOP AT POSITION 4	EVEN LAYERS		TURN BOX	LAST BOX IN ROW	LAST BOX IN LAYER	STOP AT POSITION 1	STOP AT POSITION 2	STOP AT POSITION 3	STOP AT POSITION 4
BOX 1		x							BOX 1								
BOX 2		x							BOX 2			x					
BOX 3			x			x			BOX 3								
BOX 4			x			x			BOX 4			x					
BOX 5		x							BOX 5		x						
BOX 6		x							BOX 6		x						
BOX 7			x	x		x			BOX 7		x	x	x				

7. Using the Excel™ spreadsheet, title and designate the number of layers in a finished pallet.
8. Place an "X" in the designated box appropriate for case manipulation. Up to 40 cases per layer.
9. When a row stop is required, place an "X" in the appropriate stop position.
10. Input the RECIPE VALUES into the operator interface, title the layer pattern and save the program.
11. The new layer pattern is now programmed and can be retrieved at any time from operator interface memory.
12. The operator interface will retain 50 different patterns.