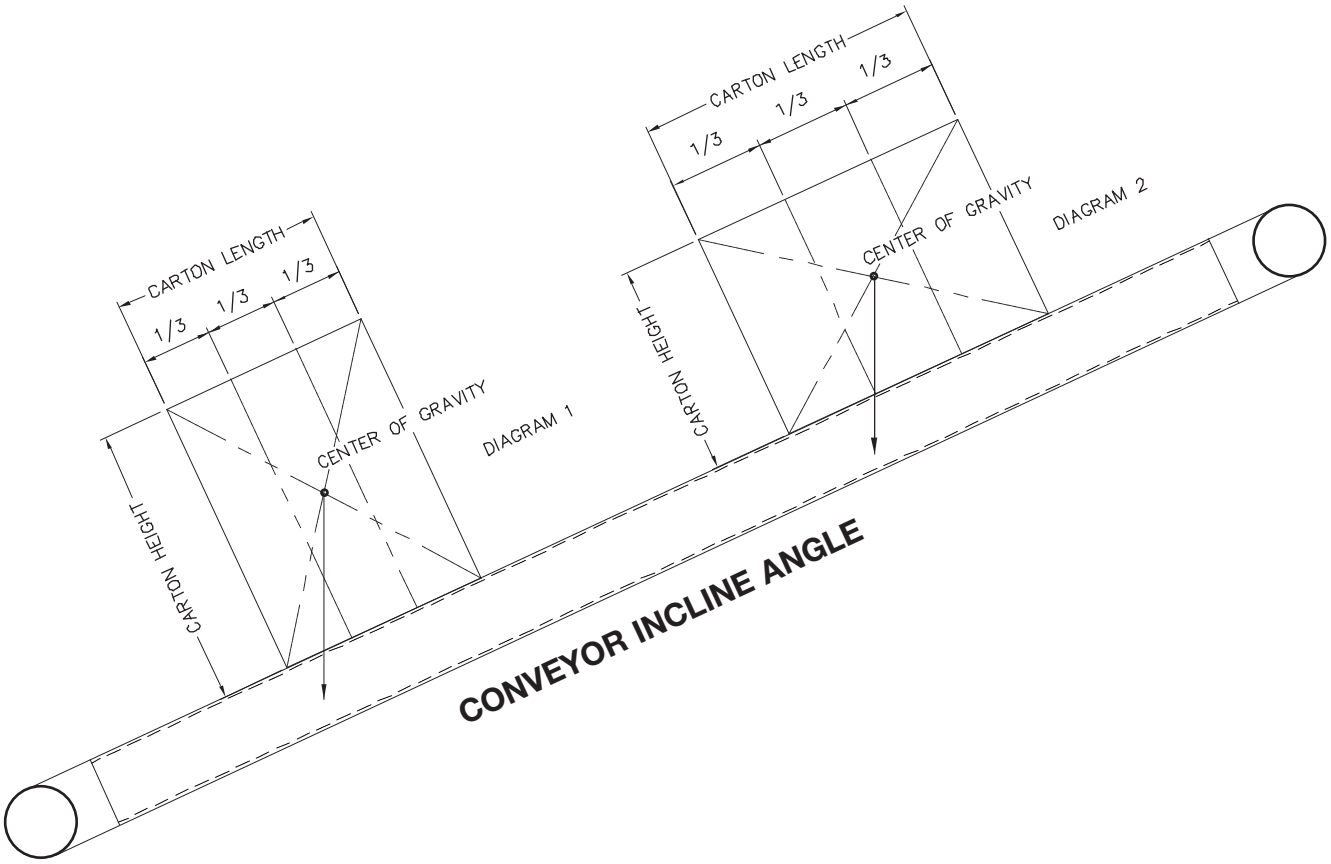
Box Tumbling Diagram



DETERMINING FACTORS ON BOX TUMBLING:

1. Draw conveyor angle of incline.
2. Draw box size on conveyor.
3. Draw diagonal lines to find center of box.
4. Divide lower portion of box into thirds.
5. Draw vertical line as shown
6. If vertical line falls within the lower third (See Diagram #1) the box may tumble depending on weight distribution.
7. If vertical line falls within the upper two thirds (See Diagram #2) the box will not tumble.

General guideline rate of fall chart for flow on gravity roller conveyor. Exact rate of fall should be determined at time of installation with actual product to be conveyed.

GRAVITY ROLLER RATE OF FALL CHART

Product with Conveyable Underside Surface	Weight Range in Pounds	Fall in 10'0"
Cartons	1 to 5	8" to 9"
Cartons	5 to 15	7" to 8"
Cartons	15 to 50	6" to 7"
Cartons	50 to 75	5" to 6"
Wood Boxes	20 to 50	5" to 6"
Wood Boxes	50 to 150	4" to 5"
Wood Boxes	150 to 200	3" to 4"
Steel Tote Bins	15 to 50	3" to 4"