

# SHOCKWATCH/TILTWATCH PROGRAM IMPLEMENTATION

As a preamble to your initiating the use of Shockwatch or Tiltwatch \* (or both) at your facility, please read the following:

## INTRODUCTION

Shockwatch, together with this simple implementation program, will allow you to monitor rough handling and reduce product damage via transport.

### Shockwatch®

- Provides immediate proof of rough handling
- Is an impact sensor that adheres directly to your shipments  
See the Selection/Placement/Program Guide
- Comes in a range of different sensitivities to cover a variety of applications  
See the Selection/Placement/Program Guide
- Is a sensor that turns from white to red when an excessive impact occurs



The Shockwatch program encourages all handling personnel to be more careful, helps to reduce damage, pinpoints rough handling areas and is a Win-Win-Win for the shipper, carrier and consignee.

\*Tiltwatch Tilt Monitors follow the same program steps as Shockwatch except they promote upright handling at all times.

From this.....to this.....using Shockwatch



# SHOCKWATCH

## IMPLEMENTATION PLAN

### Action steps

- Inform your people
- Inform your carriers
- Inform your customers
- Introduce the program and monitor the results

### Shockwatch Label Placement

- Place the Shockwatch label close to the right hand edge
- The heavier the shipment, the lower the Shockwatch label is placed
- Never place the Shockwatch label in the middle or on a flexible surface
- When the length is twice the width, use two labels on opposite sides, close to the right hand edge

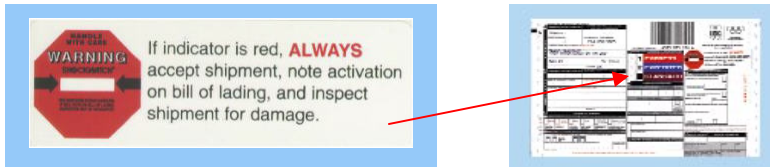
### LABEL DESCRIPTION

Green - L-30  
 Orange - L-35  
 Red - L-47  
 Purple - L-55  
 Yellow - L-65

### PLACEMENT

Upper right hand edge  
 Upper right hand edge  
 Bottom 1/3 of container, right hand edge  
 Bottom 1/3 of container, right hand edge  
 Bottom 1/3 of container, right hand edge

**Alert Message** - Place on delivery documents under “Special Instructions”, or as close as possible to where the shipment is signed for when changing hands.



**Companion Label** - Place Shockwatch on Companion Label. The Companion label instructs carrier on what to do when the Shockwatch indicator is red.



# selection guide

## SHOCKWATCH LABEL

### Using This Selection Guide...

This selection guide and sensor activation table should always be used as a starting point (rule of thumb). Packaging design and construction may affect the correlation between drop height and Shockwatch activation. **We recommend that you speak to a Shockwatch Representative before placing an order.**



Two things you need to know to select a Shockwatch sensitivity:

1. Cubic Meters of shipment (height x width x depth)
2. Weight of shipment.

Shipment Size Weight Kilograms	.001-.030 CUBIC METER	.031-.135 CUBIC METER	.136 - .400 CUBIC METER	.401-1.350 CUBIC METER	1.351+ CUBIC METER
0-4.5	GREEN	GREEN	ORANGE	ORANGE	RED
4.6 -11.25	GREEN	ORANGE	ORANGE	RED	RED
11.7 – 22.5	ORANGE	ORANGE	RED	RED	PURPLE
23 - 45	ORANGE	RED	RED	PURPLE	PURPLE
45.5 – 112.5	RED	RED	PURPLE	PURPLE	YELLOW
113 – 450*	RED	RED	PURPLE	YELLOW	YELLOW
451 +*	—	PURPLE	YELLOW	YELLOW	YELLOW

Cubic Meter = height x width x depth

### EXPECTED DROP HEIGHT FOR SHOCKWATCH ACTIVATION

COLOR LABEL	YELLOW L-65	PURPLE L-55	RED L-47	ORANGE L-35	GREEN L-30
UNDER 45 KILOGRAMS	—	.30 - .50 M	.30 - .60 M	.60 - .91 M	.91 M - OVER
OVER 45 KILOGRAMS	.15 - .30 M"	.20 - .41 M	.30 - .48 M	—	—

\*For shipments in excess of 136 kilograms, you may want to consider the MAG 2000, a re-settable unit that also measures direction of impact.

# SHOCKWATCH®

## Shipping/Selection/Placement Guide

### WHAT IS SHOCKWATCH

The SHOCKWATCH SENSOR is a “state-of-the-art” impact detection device. Shockwatch is NOT a damage detector! It is a simple non-mechanical device designed to activate (turn red) when a specified level of shock or impact occurs. The device has no moveable parts and is completely self-contained. Specifically, the sealed glass tube has a small amount of proprietary red liquid at one end (the end you can’t see) and a white coating at the other end (the part showing on the label).



### HOW DOES SHOCKWATCH WORK

The red liquid is held in place by the surface tension of the liquid itself – much like a drop of water on a highly waxed surface. Based on several factors in the process of manufacture, the amount of “force” necessary to disturb the surface tension can be controlled and predicted. Once that happens, the red liquid dissipates into the white coating, thus turning the label “RED”. Normal handling and vibration will NOT activate Shockwatch.

**IMPORTANT:** The SHOCKWATCH SENSOR is designed to take on the weight and mass properties of the object to which it’s attached. It will react differently if simply held in your hand freely before attachment. Once attached it measures impact as registered on the object itself. When the sensor turns RED it is an indication of rough handling and potential damage to the contents.

The sensor now becomes:

- ⇒ A “MEANS” OF DEFINING “FRAGILE” for handlers
- ⇒ A ‘FRAGILE” warning that cannot be ignored
- ⇒ A “PREVENTION TOOL” to eliminate abusive handling
- ⇒ A “DOCUMENTATION TOOL” to assist in timely claims
- ⇒ A “MARKETING TOOL” advertising “Quality” and a “We Care More” attitude

### HOW DO I KNOW WHICH LABEL TO USE

The standard Shockwatch labels are available in five sensitivity levels. A selection guide is provided to help you determine which label to use on your shipping containers.

1. Determine the size (volume) of your shipping container in cubic feet (height x width x depth).
2. Determine the total weight, including the item(s) shipped, all packing material and the shipping container itself.

Once these two factors have been determined, refer to the Shockwatch Selection guide for the appropriate Shockwatch label.

#### WHAT IF MY SHIPMENT FALLS ON THE BORDER BETWEEN TWO DIFFERENT SENSITIVITIES ON THE SELECTION GUIDE

When variables cause a selection to be borderline, contact your local Shockwatch Representative. Typically one should pick a less sensitive sensor (one that requires a higher level drop) due to the psychological inhibition and control qualities Shockwatch has over a person. Besides, a higher drop may mean “excessive or abusive” handling which will have a greater probability of damage if activated. If a container is never abused or mishandled, the probability of concealed damage is eliminated.

Remember, you are picking a starting point for a Shockwatch evaluation program. The final selection must be based on actual performance. Often the “fragility” of the object protected by Shockwatch may not be completely defined. The nature of the shock the object will undergo is more complex than generated in most laboratory tests.

#### WHERE SHOULD THE “ALERT STICKER” PROVIDED WITH THE LABEL BE PLACED

If possible, the self-adhesive Alert Sticker should be attached to the waybill or packing slip. Alternately, the sticker can be placed adjacent to the Shockwatch sensor label on the shipping container.

#### WHERE SHOULD THE LABEL BE PLACED ON THE SHIPPING CONTAINER

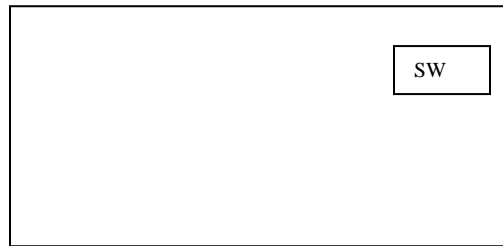
Shockwatch should always be placed on the side – not on the top – of the container. It should be placed at the sturdiest part of the container, i.e. next to the corner of the container, down slightly from the top, where it is most rigid. Do not place the label in the center of the container. It is also best to use two (2) labels if the shipping container is twice as long as it is wide – or if the shipment is palletized. In this case, the labels should be placed diagonally across from each other on opposite sides of the container.

## PLACEMENT GUIDES

### L-30 GREEN SHOCKWATCH SENSOR LABEL = 100 g's @ 50 msec

1. Used on shipments of 1 lb. to 35–50 lbs. to monitor drops over 36". Activation range, depending on packaging, can be from 36" to 48".
2. Used primarily on UPS, RPS, Federal Express or other types of (hand carry) package carriers.
3. Placement of label is in upper right hand corner of box on side nearest packing slip or address label.

Side View



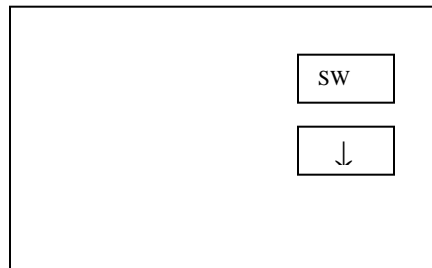
Upper corner placement

### L-35 ORANGE SHOCKWATCH SENSOR LABEL = 75 g's @ 50 msec

1. Used on shipments of 25 lbs. to 75–100 lbs. to monitor drops of 24" to 36".
2. Used primarily on Federal Express or other Air Freight carriers, LTL as well as UPS or RPS.
3. Placement of label is in upper right hand corner of box on side nearest packing slip or address label.
4. If item is large or extra sensitive, placement of label can be made from the middle to the upper corner of the side.



Side View

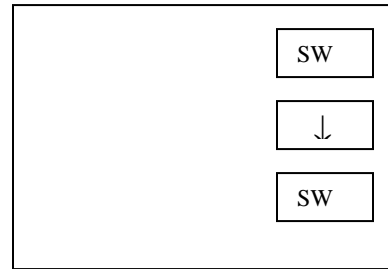


Upper to Middle corner placement

**L-47 RED SHOCKWATCH SENSOR LABEL = 50 g's @ 50 msec**

1. Used on shipments of 50 to 300 lbs. to monitor drops from 12" to 24".  
Activation usually occurs as follows:
  - a. 50 to 100 lbs. = 18" to 24"
  - b. 100 to 300 lbs. = 12" to 18"
2. Used primarily on Common Carrier, Air Freight or LTL. **No UPS** – sensor too sensitive for UPS handling.
3. Generally, items over 100 – 125 lbs. should require two (2) labels, particularly if the unit is large, bulky, palletized or very sensitive equipment.
4. Placement should be 12" to 24" from bottom (diagonally across) on opposite sides.
5. Placement of single label shipment can be from the middle to upper corner of container side.

Side View



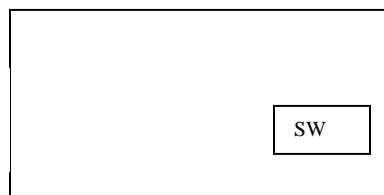
Single Label – Upper to Middle Corner  
(2) Labels per carton – 12" – 24" from  
bottom (both sides)

**L-55 PURPLE SHOCKWATCH SENSOR LABEL = 37 g's @ 50 msec**

1. Used on shipments 50 – 500 lbs. to monitor drops of 12" to 18".
2. Used primarily on Common Carrier, Air Freight or LTL. No UPS shipments.
3. Activation usually occurs as follows:
  - a. 50 to 100 lbs – 12" to 18"
  - b. 100 to 500 lbs – 8" to 16"
4. Placement should be
  - a. 50 – 100 lbs. – middle to upper side edge of carton
  - b. 100 – 500 lbs. – 2" to 24" from bottom of pallet or carton

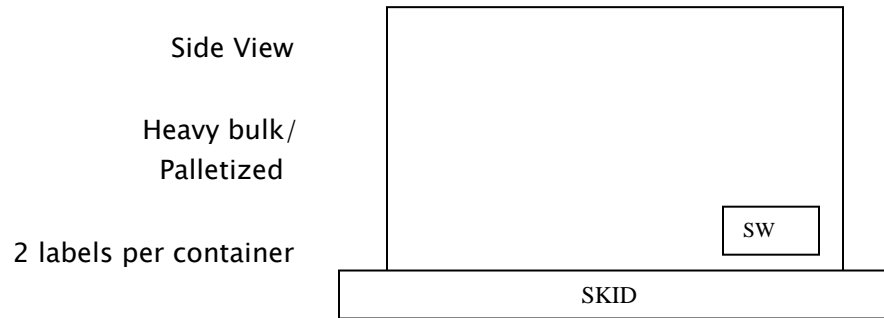


Side View



**L-65 YELLOW SHOCKWATCH SENSOR LABEL = 25 g's @ 50 msec**

1. Used on shipments over 300 lbs to monitor drops from 6" to 12".
2. Used primarily on Common Carrier, Air Freight or LTL. No UPS - sensor too sensitive for UPS handling
3. Placement should be 12" to 24" from bottom (diagonally across) on opposite sides. Use (2) labels per container.





## SAMPLE CUSTOMER LETTER

(Company Name)  
(Company address)

Dear Customer:

In an effort to reduce in transit damage and safeguard our shipments, (*Company Name*) is adopting the use of the Shockwatch label products. Instructions on the units are self-explanatory; however, for your protection and ours, please institute the following procedures to afford us the maximum benefit from the Shockwatch program.

### *Procedures for Receiving Shipment:*

1. Please do not refuse to accept shipment.
2. An activated (RED) indicator on the label does not mean that damage has occurred. It only indicates that the carton received an impact or was handled above a normally anticipated level. Only an inspection can determine if any damage has occurred.
3. If the indicator on the label is RED, please make a notation to that effect on the bill of lading or delivery receipt or document.
4. Examine contents immediately for possible damage.
5. If damage is discovered, inform carrier immediately (within **XX\*** days) and follow normal procedure for a carrier inspection and filing of a concealed damage claim.

The Shockwatch program is our way of protecting your interest in receiving quality product and protecting our goods from the time they leave our facility until they reach the final destination. It is our way of telling you that we care about you, our customer.

Thank you.

*\*USA is 15 days. Internationally many countries set 3 – 7 days as a time limit to inform the carrier if damage is found upon receipt of goods. Please include the proper number of days in this letter.*

## SAMPLE CARRIER LETTER

(Company Name)  
(Company Address)

Dear Carrier:

In an effort to reduce in transit damage and safeguard our shipments, *(Company Name)* is adopting the use of the Shockwatch label products. Instructions on the units are self-explanatory, however, for your protection and ours, please institute the following procedures to afford us the maximum benefit from the Shockwatch program.

*Procedure:*

1. Please do not refuse to accept or handle any shipment
2. An activated (RED) indicator on the label only means that the carton was subjected to rougher handling than we prefer.
3. If the indicator on the label is RED, please make a notation to that effect on the bill of lading or the transfer document, noting date/time, label color and signature of individual observing the activated label.
4. Continue the movement of the carton(s) on to the specified consignee.

The Shockwatch program encourages your personnel to be more careful, reducing damage, pinpointing trouble spots in intermodal situations, and protects you, the carrier, from false accusations by negligent shippers. Your cooperation will be appreciated.

Thank you.

# INTERNATIONAL PACKAGING SPECIFICATIONS

PRODUCT	QUANTITY	CARTON SIZE	WEIGHT LBS	WITH PALLET
L-25,L-30,L-35,L-47	50	12 x 12 x 16	3	
	100 – 200	13 x 13 x 13	5	
	250 – 400	(2) 13 x 13 x 13	5 each	24 X 24 X 30 20 lb each
	250 – 1600	24 x 24 x 24	25	
L-55 –L-65	50 – 200	20 x 20 x 20	5	24 x 24 x 30 20 lb
	250 – 1600	28 x 28 x 28	20	
L-75, L-85	50-1600	28 X 28 X 28	20	30 X 30 X 36 38 lb
C-30, C-35, C-47	300	13 x 13 x 13	5	
	301 – 1664	24 x 24 x 24	6 – 20	
C-55, C-65	200	20 x 20 x 20	5	24 x 24 x 24 20 lb
C-55, C-65	225 - 1664	28 x 28 x 28	20	
C-75, C-85	100 – 1664	28 x 28 x 28	20	30 x 30 x 36 38 lb
Multi-G Clips	24	24 x 24 x 24	4	
	25 – 200	20 X 20 X 20	8	24 X 24 X 30 23
TILTWATCH	100	12 X 12 X 9	5	
	200 – 400	13 X 13 X 13	14	
	500 – 1000	16 X 16 X 16	30	
	1100 – 1400	20 X 20 X 20	42	
	1500 – 2500	24 X 24 X 24	81	30 X 30 X 36 96 lb
	2600 – 5600	28 x 28 x 28	168	30 x 30 x 36 186 lb
TILTWATCH PLUS	200	13 X 13 X 13	12	
	300	16 X 16 X 16	18	
	400 – 2500	28 X 28 X 28	24 – 75	30 X 30 X 36 95 lb
MAG2000 - M21	24	8 x 8 x 8	5	
M22, M23	12	8 x 8 x 8	5	
M21	70	13 x 13 x 13	8	
M22, M23	35	13 x 13 x 13	8	
M21	200	16 x 16 x 16	18	
M22, M23	100	16 x 16 x 16	18	
Companion Labels (200/roll)	10	13 x 13 x 13	40	
	14	18 x 12 x 12	56	
	20	16 X 16 X 16	80	
	25	20 X 20 X 20	100	24 x 24 x 26 115 lb
	50	28 x 28 x 28	200	30 x 30 x 34 218 lb
C/L 500/roll	6	18 x 18 x 12	48	
	8	16 x 16 x 16	64	
	12	20 x 20 x 20	96	24 x 24 x 26 112 lb

# INTERNATIONAL PACKAGING SPECIFICATIONS

PRODUCT	QUANTITY	CARTON SIZE INCHES	WEIGHT LBS	WITH PALLET
<b>SHOCKSWITCH</b>	1	8 ½ x 9 ½ x 4 ½	2	
	2 – 4	13 x 13 x 13	4 – 8	
	5 – 6	16 x 16 x 16	12	
	7 – 16	20 x 20 x 20	14 – 32	
	17 – 28	24 x 24 x 24	34 – 56	
	29 – 54	28 x 28 x 28	48 - 118	30 x 30 x 34 + 18 lb
<b>MAG 3500</b>	1	12 x 6 ¼ x 5	3	
	2	12 x 12 x 9	5	
	3	13 x 13 x 13	8	
	4 – 8	16 x 16 x 16	10 – 20	
	9 – 10	20 x 20 x 20	23 - 25	
<b>SHOCKLOG</b>	1	16 X 12 X 6	6	
	2 – 3	16 X 16 X 16	12 – 20	
	4 - 8	20 X 20 X 20	24 - 50	
<b>MICROSHOCKLOG</b>	1 – 4	8 x 8 x 8	2 - 9	
	5 - 6	13 x 13 x 13	6 – 12	
	7 - 12	16 X 16 X 16	14 - 26	