#### INSTALLATION MANUAL





#### **USA Metal Roof LLC**

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## Contents

	Page
Installation, Storage, Tools	2
Safety Tips, Maintenance, Important Notice	
Direction of Application	4
Installation Details Overview	5
Eave and Gable Details	6
Wall Flashing Details	7
Valley and Cottage Roof Cap Details	88
Transition Flashing Detail (high to low pitch)	9
Transition Flashing Details (low to high pitch)	10
Ridge Details	11
Half Ridge Cap Details	12
Plumbing Vent and Hydro Mast Details	13
Snow Guard Detail	
Flashings & Trims	15
Estimate Sheet	





#### Installation

The "Wakefield Bridge" steel shingles must be installed on roofs with a minimum pitch of 4/12.

For the best results, **Ideal Roofing** recommends the removal of the asphalt shingles prior to installing the "**Wakefield Bridge**". First inspect the deck underneath and replace any damaged decking then apply the underlayment. Consult your local distributor for the choice of the appropriate underlayment. For re-roofing over existing asphalt shingles, inspect the deck underneath to ensure a solid base. Correct or remove curled up shingles then apply a synthetic waterproof underlayment before installingthe "**Wakefield Bridge**" **This application requires 1**½" **long screws and starter #815.** 

For new construction and in climates that experience freezing temperatures and (or) high winds, use waterproof peel and stick membrane "High Temperature" on the first 36" from the eave, 12" from the edge of the gable, 36" on each side of the valley, 12" around skylights and chimneys. For the remainder of the roof, use synthetic waterproof underlayment. On roofs with multiple slope variations and dormers, the use of peel and stick membrane "High Temperature" on the entire roof surface is highly recommended. Consult your local distributor for the choice of the appropriate underlayment. This application requires the starter #815

## Storage

Storage time should be minimized by installing the metal shingles as soon as possible. If shingles must be stored for an extended period, the ideal storage place is under a roof in a cool, dry and well ventilated area.

When outdoor storage is unavoidable, the following is recommended:

- 1- Use good quality covers over stacks,
- 2- Block bundles off the ground,
- 3- Store away from chemically aggressive substances (e.g. salt, cement, fertilizer, diesel, oil, paint, and grease).

#### Tools

Electric screw gun with adjustable torque.

Tin snips or nibblers.

Measuring tape.

Screw (nail) apron.

Rubber mallet.

Locking sheet metal pliers ("Vice Grip" type).





## Safety Tips

Working gloves.

Proper eye protection.

Hard hat.

Rubber-soled shoes (Steel roofing can be slippery when wet or icy).

Properly secure material on the roof.

Safety harness.

Knee pads.

Avoid installing on a windy day.

Avoid having loose materials and tools on the roof.

Avoid walking on the locks/seams of the shingles.

Secure area below work.

Use proper attachment for fall protection.

#### Maintenance

When walking on the roof, avoid stepping on the interlocks of the steel shingles.

To avoid scratching the paint on the "Wakefield Bridge" Steel Shingles, make sure to clean up the bottom of your rubber-soled shoes from any stones or debris before stepping on the roof.

Inspect and remove any debris (leaves, nails,...) on an annual basis. Use touch up paint to protect any scratches

#### Important Notice

When ordering pre-painted "Wakefield Bridge" Steel Shingles, it is always preferable to order all items of the same color at the same time to avoid slight color differences between batches.

The material should be checked against the shippinglist as soon as it is received. Any damage or shortage of material on the bill of lading should be noted and reported to the driver or to our offices immediately.

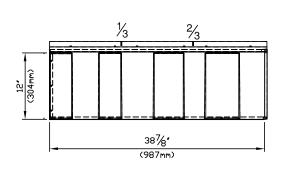
Do not use pressure treated lumber in direct contact with the "Wakefield Bridge".

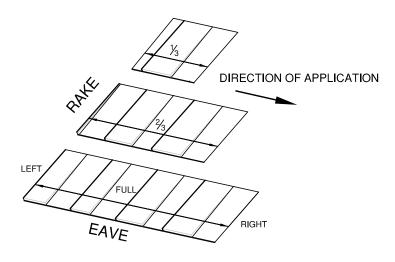
Ideal Roofing will deliver the "Wakefield Bridge" steel shingles to its dealers only. No job site delivery will be done by Ideal Roofing.



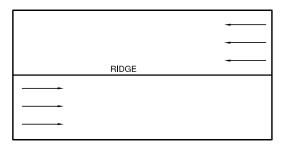
## Direction of Application

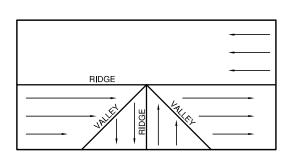
Install the "Wakefield Bridge" Steel Shingles from left to right starting with a full panel on the first row, 2/3 and 1/3 of panel to start the second and third row. Repeat the steps for the remainder of the roof section.

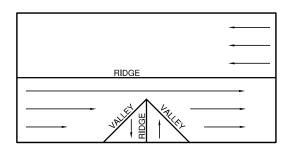


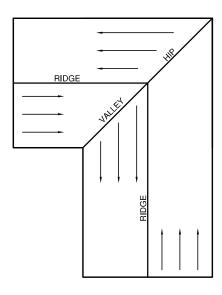


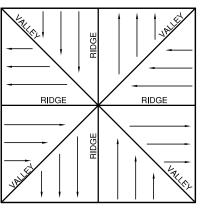
#### **ROOF TYPES: PLAN VIEWS**









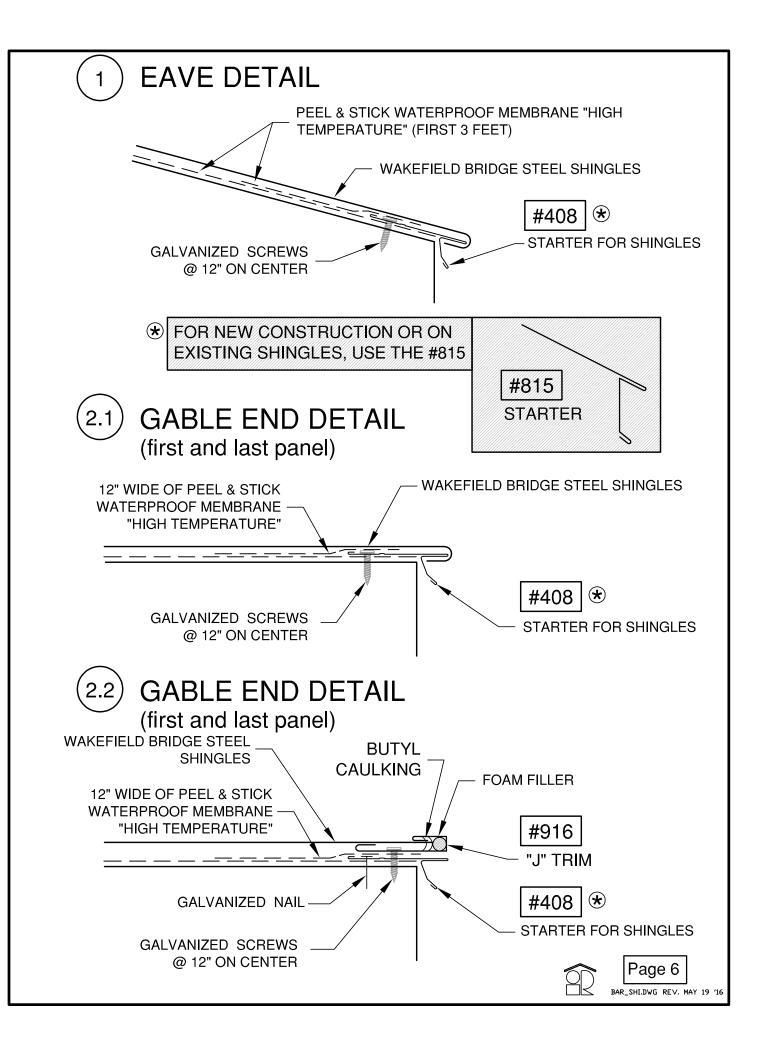


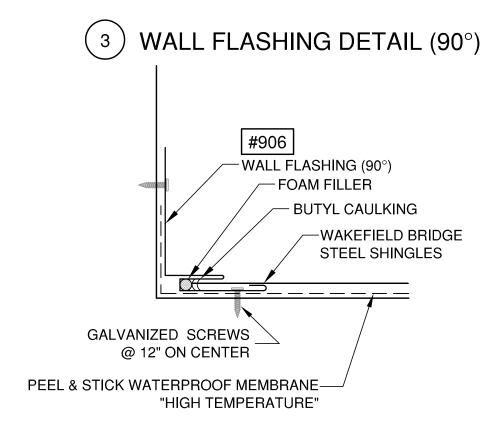


Page 4

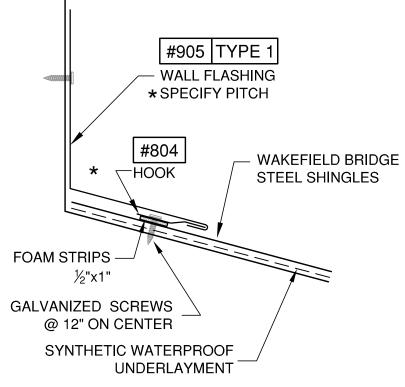
BAR\_SHI.DWG REV. MAY 19 '16

# **INSTALLATION DETAILS OVERVIEW 8.3**(PAGE 12) (PAGE 10) **8.1**8.2 (PAGE 11) 9 (PAGE 13) 6 (PAGE 8) **8.1**8.2 (PAGE 11) (PAGE 8) (PAGE 6) (PAGE 7) Page 5 BAR\_SHI.DWG REV. MAY 19 '16





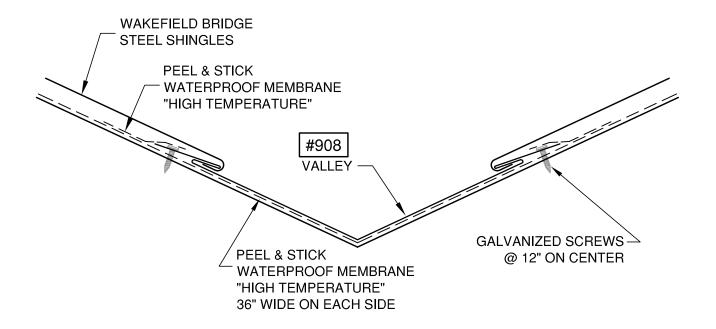
## (4) WALL FLASHING DETAIL (SLOPED)



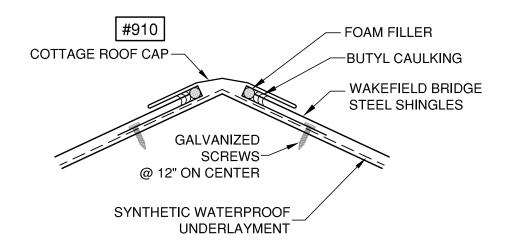








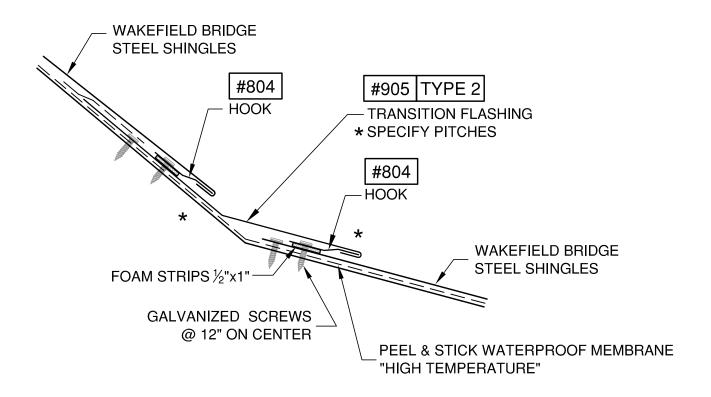
## 6 COTTAGE ROOF CAP DETAIL







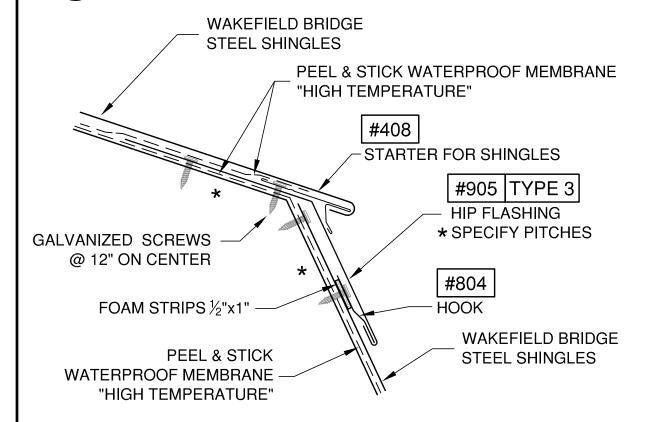
## (7.1) TRANSITION FLASHING DETAIL (high to low pitch)



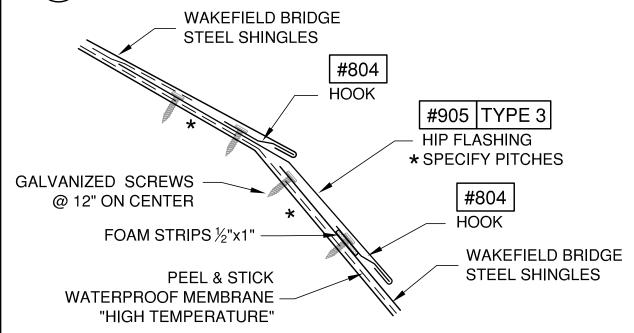




## (7.2a) TRANSITION FLASHING DETAIL (low to high pitch)



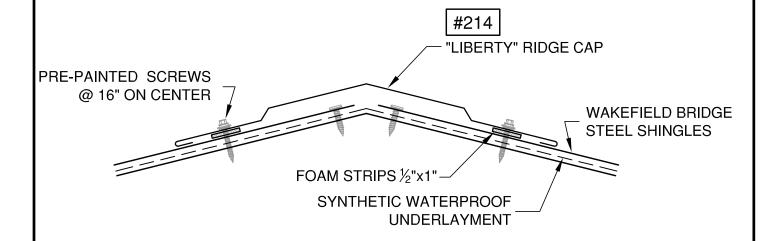
## (7.2b) TRANSITION FLASHING DETAIL (low to high pitch)



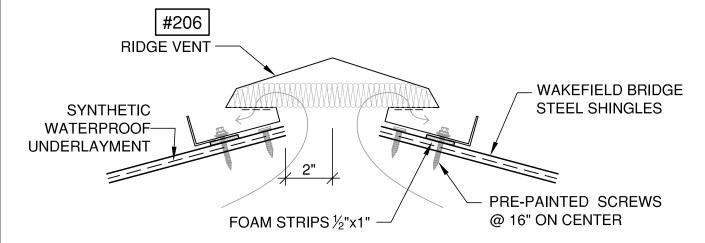




## (8.1) RIDGE CAP DETAIL



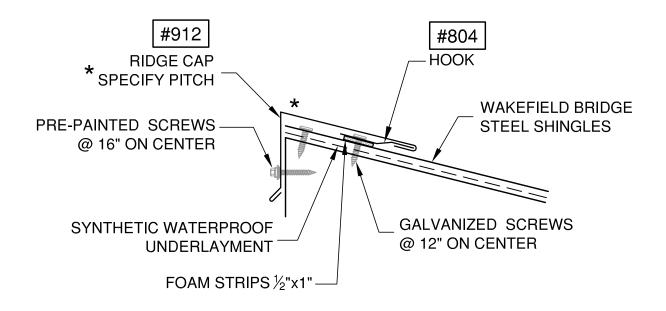
## (8.2) RIDGE VENT DETAIL



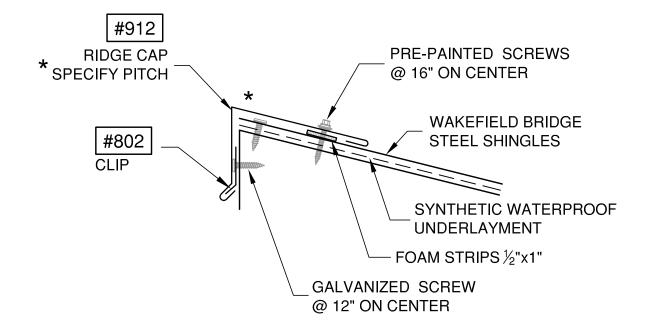




## (8.3) HALF RIDGE CAP DETAIL



## (8.4) HALF RIDGE CAP DETAIL

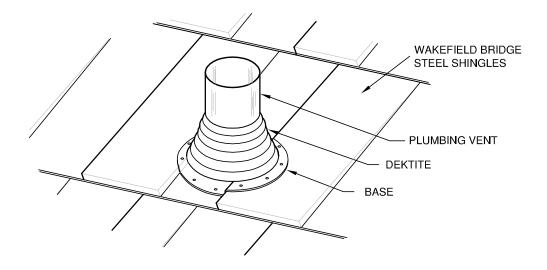






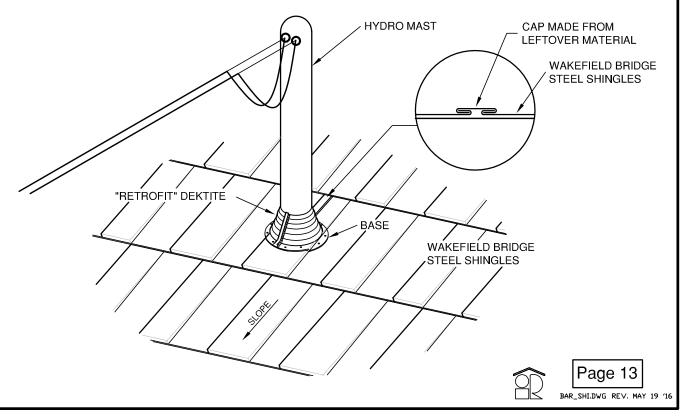
## (9.1) PLUMBING VENT DETAIL

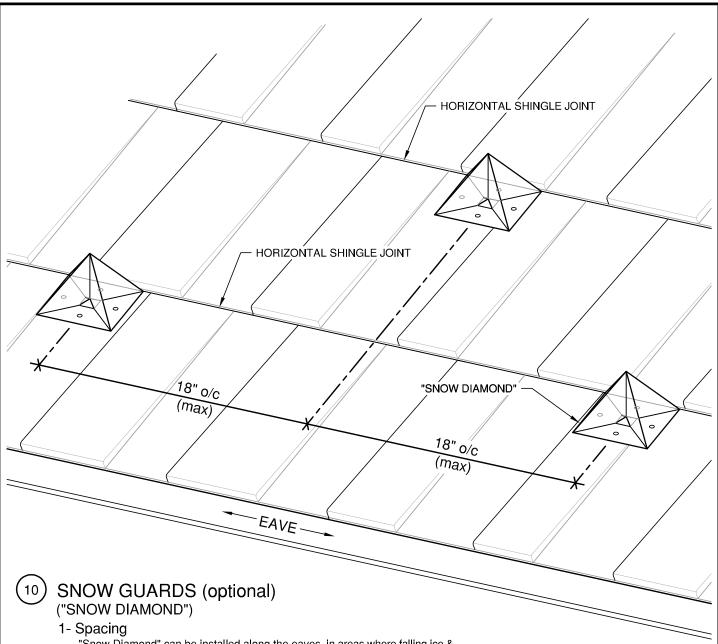
-ONCE THE STEEL SHINGLES ARE INSTALLED, CUT THE "DEKTITE" TO THE APPROPRIATE DIAMETER, AND SLIDE OVER PIPE. SECURE THE DEKTITE'S BASE WITH A SEALANT (BETWEEN THE BASE AND ROOFING) THEN FASTEN.



## (9.2) HYDRO MAST DETAIL

-ONCE THE STEEL SHINGLES ARE INSTALLED, CUT THE "RETROFIT DEKTITE" TO THE APPROPRIATE DIAMETER AND INSTALL AROUND THE HYDRO MAST. CLAMP THE FLASHING TOGETHER AND SECURE THE BASE WITH A SEALANT (BETWEEN THE BASE AND ROOFING) THEN FASTEN.

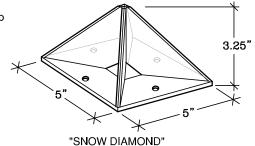




- -"Snow Diamond" can be installed along the eaves, in areas where falling ice & snow is a concern.
- Install the "Snow Diamonds" up against a horizontal shingle joint, in 2 rows (staggered). Horizontal spacing should be 18" o/c (maximum).
- Note that the spacing between the "Snow Diamonds" may be reduced for steep roofs and/or roofs with long rafters.

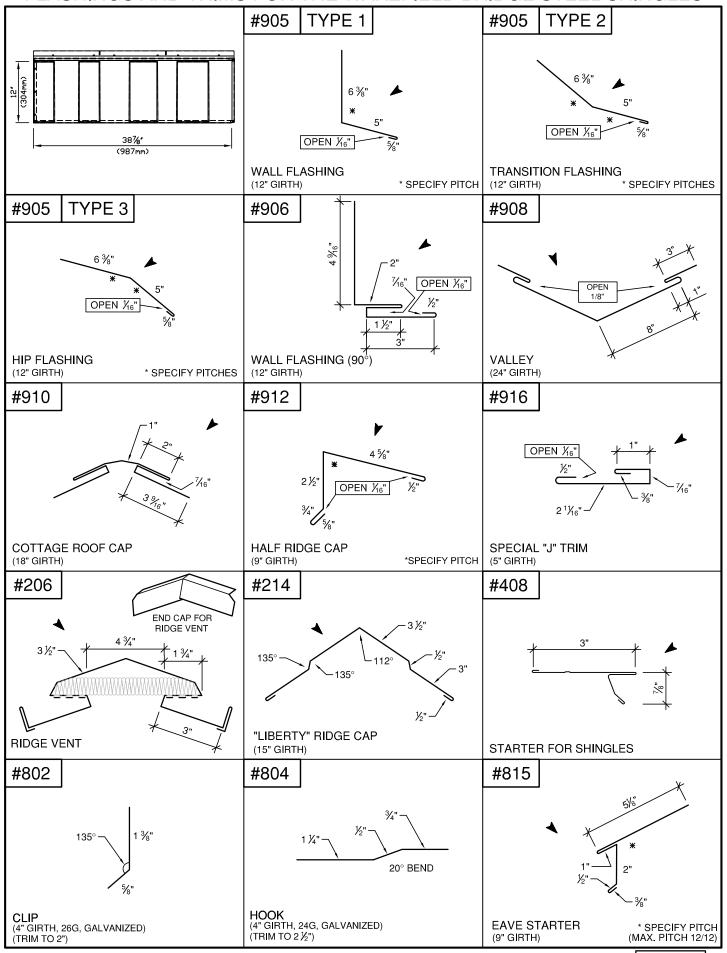
#### 2- Installation

- a) Spread bead of sealant evenly underneath the Snow Diamond's base.
- b) Place the Snow Diamond in position on metal surface by applying light and even pressure. Insure solid backing underneath the Snow Diamond.
- c) Use screws with neoprene washers through pilot holes in the Snow Diamond and tighten to cause approximately 50% compression in neoprene washers.
- d) Four screws to be used per Snow Diamond.





#### FLASHINGS AND TRIMS FOR THE WAKEFIELD BRIDGE STEEL SHINGLES



Estimate Sheet (Wakefield Bridge Ste  COMPANY:  CITY:  CONTACT:  PHONE:  FAX:  EMAIL:  JOB NAME:  JOB ADDRESS:		(8.1)(8.2)	9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Colour:			
Steel Shingles	Total Roof Area  Total Boxes x \$		
1 Eave / Starter - Starter # 408 or # 815 (10 ft)	Total Length	x \$	per lin./ft = \$
2 <u>Gable / Rake</u> - Starter # 408 or # 815 (10 ft)	Total Length	x \$	per lin./ft = \$
- "J" trim # 916 (10 ft)	Total Length	x \$	per lin./ <b>\$</b> =
Wall Detail 90° - # 906 (10 ft)	Total Length	x\$	per lin./ft = \$
Wall Detail (slope) - # 905 TYPE 1 (10 ft)	Total Length	x \$	per lin./ft\$ =
- Hook # 804 (10 ft)	Total Length	x \$	per lin./ft =\$
5 <u>Valley Detail</u> - Valley # 908 (10 ft)	Total Length	x \$	per lin./ft\$ =
(6) Hip Detail - Cottage Roof Cap # 910 (10 ft)	Total Length	x \$	per lin./ft \$





7.1	Transition Detail -# 905 TYPE 2 (10 ft)	Total Lengt\$ =	_x \$	per lin./ft
	- Hook # 804 (10 ft)	Total Length	_x\$	per lin./ft = \$
7.2	Transition Detail (Hip) -# 905 TYPE 3 (10 ft)	Total Lengt\$n =	_x \$	per lin./ft
	- Hook # 804 (10 ft)	Total Length	_x \$	per lin./ft =
(8.1)	Ridge Details - "Liberty" Ridge			
	Cap # 214 (10 ft)	Total Len <b>g</b> th	_x \$	per lin./ft =
8.2	- Ridge Vent (10ft)	Total Length	_x\$	per lin./ft = \$
	- End cap for Ridge Vent (pcs)	Total Pieces iece = \$	_x \$	per p
8.3	- Half Ridge # 912 (10 ft)	Total Length/ft = \$	_x\$	per lin.
8.4	- Hook # 804 (10 ft)	Total Length	_x\$	per lin./ft = \$
	- Clip # 802 (10 ft)	Total Length	_x \$	per lin./ft = \$
	Accessories			
	- Backer Rod ( 25 ft roll )	Total Roll\$ =	_x \$	per roll
	- Foam Strip ( 1/2"x1"x25' )	Total Length ./ft = \$	_x\$	per lin
	- Butyl Caulking ( 300ml )	Total Tubes \$ =	_x \$	per tube
	- Galvanized Screws 1" (flat head)	Total per/100	_x\$	per/100 = \$
	- Galvanized Screws 1.5" (flat head)	Total per/100	_x\$	per/100 = \$
	- Pre-Painted Screws 1.5"	Total per/100 \$ =	_x\$	per/100
	- Flat Sheet ( 4' x 10' )	Total Sheet\$ =	_x\$	per sheet
9	- Dektite "pipe" ( #3, #4 & #8 )	Total Pieces piece = \$	_x \$	per
	- Dektite "Chimney" (#8 HT)	Total Pieces ece = \$	_×\$	per pi
	- Retrofit Dektite "Hydro Mast" (#802)	Total Pieces\$ =	_x \$	per piece
	- Touch Up Paint ( 10oz )	Total Cans \$	_x \$	per can =
10	- Snow Diamond H=3.25"	Total Pieces	_x \$	per piece = \$
				Total Material Cost \$

Note: Consult our installation manual for more details on flashings and accessories.

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