



BID CLARIFICATION #5

September 11, 2019

DUE DATE: September 17, 2019
TIME: 2:00 p.m.
PROJECT: Horse Unit I and II Lorentzon Stables Upgrade
Project Number: FO500051
LOCATION: University of Connecticut
Capital Projects & Facilities Procurement
3 Discovery Drive
Storrs, CT 06269
Attn: Walt Dalia

Please note the following information must be incorporated into your proposal for the Horse Unit I and II Lorentzon Stables Upgrade, Project #FO500051:

- 1) Attached is a revised RFI Response Log dated September 11, 2019**

End of Bid Clarification #5

Horse Unit I and II Lorentzon Stables Upgrade

RFI Log - Project #FO500051

9/11/2019 14:41

RFI No.	Submitting Company	Date Submitted	Question	Response
1	Kronenberger & Sons	19-Aug-19	Specification Section 01-1000-5, 1.7: The 30 day duration for this project is not realistic given some of the long lead time items required. For example, new doors typically take 8 - 10 weeks after approval to be delivered. Can the project duration be revised to 120 days?	The Duration has been revised to 120 Days
2	Kronenberger & Sons	26-Aug-19	Specification Section 02-4119 - Drawing A-100 Demo Notes 5 & 6: Demo notes 5 & 6 on drawing A-100 call for removal of the Phantom Mount and Horse Paddock. Upon reviewing on site, it appears both of these items are made of steel, therefore quite heavy and embedded in concrete footings. To remove them will require a machine with some decent lifting capacity and quite a bit of jackhammering on the concrete footings. Please confirm as I don't believe the plans really illustrate how much work is required to remove these items.	Options are being considered by User Group will confirm directions shortly.
3	Sarazin General Contractors	26-Aug-19	The drawings call for metal stud framing for the interior partitions while the specifications call for wood. Please advise as to which it is.	Wood studs would be acceptable.
4	Sarazin General Contractors	26-Aug-19	Is plywood to be used on the roof of the new portico or is it to be framed in a way similar to the existing. Please advise.	Plywood is to be used as sub-roof deck for the roof of the new portico. The appearance of the roof is to be similar to the existing.
5	Sarazin General Contractors	26-Aug-19	The drawings call for double 2 x 12 wood beams in the extended portico but triple 2 x 12 wood beams are drawn. Please advise which is correct.	Double 2 x 12 Wood Beams is acceptable.
6	Sarazin General Contractors	26-Aug-19	What is the fate of the phantom mount if the alternate for the new pavilion is not used? Please advise.	Response to be determined.
7	Sarazin General Contractors	26-Aug-19	At the prebid meeting it was stated that the specifications for the new stall walls would be provided so we could price and purchase them. Please supply the information ASAP as the RFI cut-off is near and bidders may have questions.	Animal Services will now purchase and install the stable enclosure
8	Kronenberger & Sons	27-Aug-19	Drawing A-200: Please provide specs for the new Stall Unit 4 including the manufacturer and model number.	See Above RFI (Number 7)
9	Kronenberger & Sons	27-Aug-19	Division 7 - Drawing A-201 & A-202: Please provide asphalt & metal roofing specs.	See attached
10	Kronenberger & Sons	27-Aug-19	Specification Section 02-4119 - Drawing A-100: Are demo notes 8 & 9 base bid or alternate #1 scope?	Demo note 8 is non-contingent upon alternate #1, while demo note 9 is. Meaning regardless of the alternate note 8 (remove turf & regrade) is still to be completed.
11	Sarazin General Contractors	27-Aug-19	What type of siding is to be installed on the driveway side of the new end wall of the extended portico? What type of siding is to be installed on the opposite side, if any?	Tongue & Groove vertical cedar siding. (Same as pavilion gable)
12	Sarazin General Contractors	27-Aug-19	What gauge thickness is desired for the new metal roofing?	26 Gauge
13	Sarazin General Contractors	27-Aug-19	What gauge thickness is desired for the new metal siding?	Siding to be Tongue & Groove vertical cedar siding, not metal siding.
14	Sarazin General Contractors	27-Aug-19	Drawing A300, it shows a new exhaust louver and Drawing E101 shows wiring into EF-1. There are no mechanical drawings or specifications for EF-1 or the proposed louver. Please have this clarified.	See Attached



Quality You Can
Trust... From
North America's
Largest Roofing
Manufacturer!

TIMBERLINE®

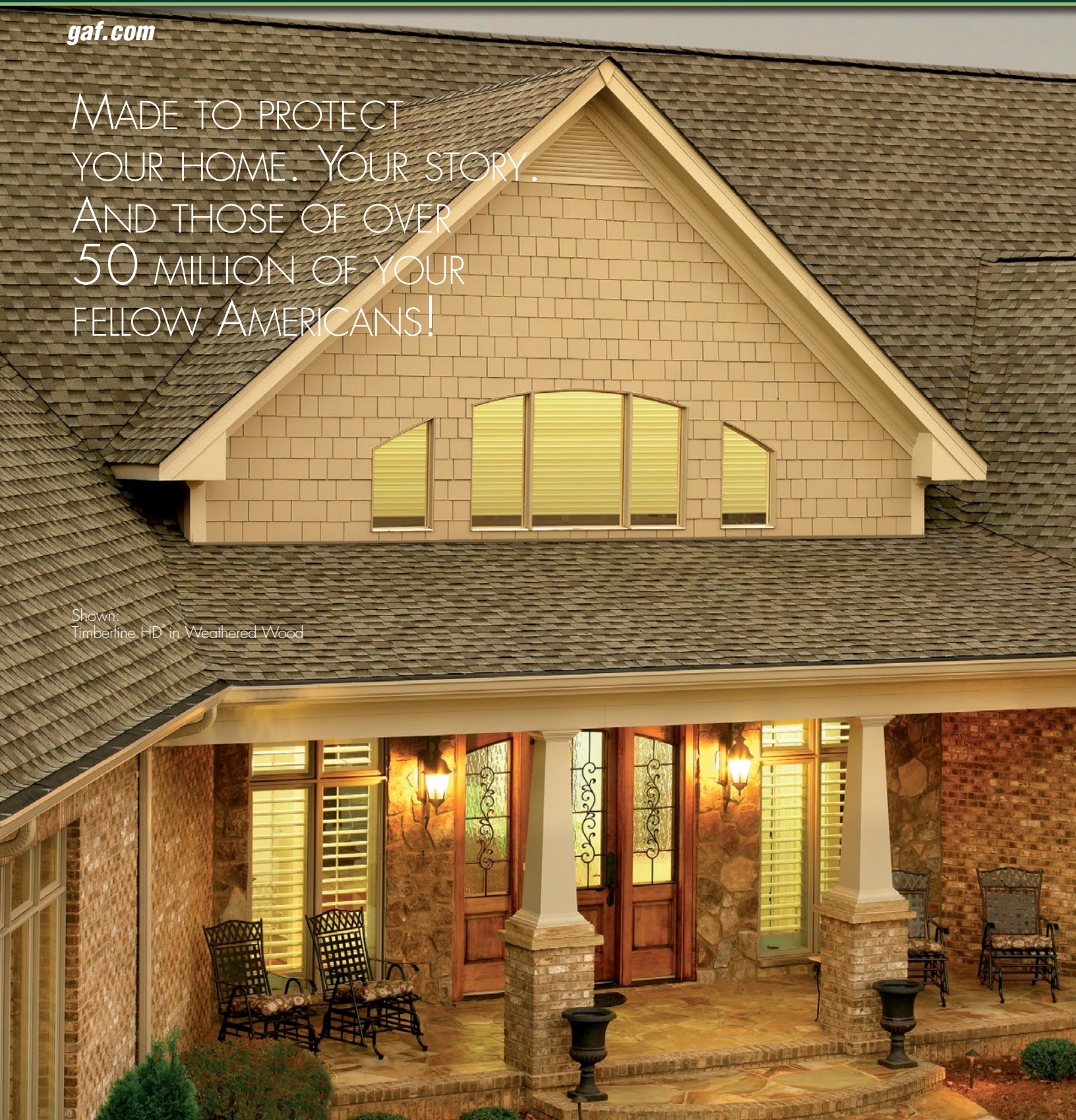
LIFETIME HIGH DEFINITION® SHINGLES

AMERICA'S #1-SELLING ROOF

gaf.com

MADE TO PROTECT
YOUR HOME. YOUR STORY.
AND THOSE OF OVER
50 MILLION OF YOUR
FELLOW AMERICANS!

Shown:
Timberline HD in Weathered Wood



Install Peace Of Mind



Whether you install the ultra-dimensional Timberline Ultra HD® Shingles or the ever-popular Timberline HD® Shingles, you'll be getting all the benefits that only a genuine Timberline® roof can provide!



Weathered Wood

Install To Protect.

When you install GAF Timberline® High Definition® Shingles with **Advanced Protection®** Shingle Technology, you're getting the very best combination of weight and performance that modern manufacturing technology can deliver. In fact, you won't find a shingle that surpasses Timberline® on:

- ✓ Toughness
- ✓ Wind uplift resistance
- ✓ Flexibility
- ✓ Fire resistance



That's why every Timberline® High Definition® Shingle comes with a GAF transferable Lifetime® Ltd. warranty* — for your peace of mind! — plus the backing of the Good Housekeeping Seal.**



Install To Invest.

Your roof can represent up to 40% of your home's "curb appeal." Timberline® High Definition® Shingles not only protect your most valuable asset but also beautify your home for years to come — and add to its resale value.

An independent research firm surveyed U.S. homeowners about the brand of architectural shingles they preferred based on appearance. The result: **more homeowners preferred the look of Timberline® High Definition® Shingles** to the other leading brands.¹

In fact, according to a survey conducted by the National Association of REALTORS®, you can increase the value of your home by an average of 5% with a new Timberline® roof!²

So why settle for anything less than a genuine Timberline® roof?

¹Based on a 2014 survey of U.S. homeowners commissioned by GAF comparing the appearance of two popular Timberline® High Definition® Shingle colors to the comparable colors of other leading brands.
²2013 National Association of REALTORS® survey commissioned by GAF of REALTOR® Appraisers and Non-Appraisers in the U.S.; response based on REALTOR® Appraisers that have had professional experience buying or selling a home with Timberline® Shingles in the three years preceding the survey and felt they could provide an estimated value increase for a home with a Timberline® roof as compared to a home with a basic three-tab shingle roof.

NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

Install To Impress.

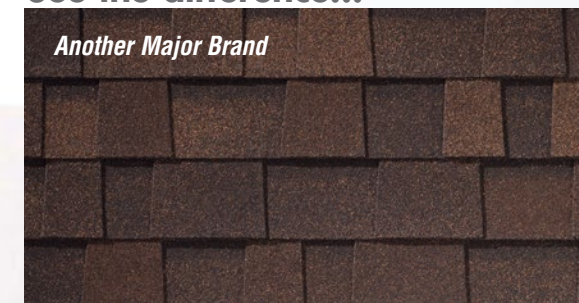
Timberline® High Definition® Shingles are unlike any others, thanks to our proprietary shadow bands. Each shadow band is applied using a sophisticated, computer-controlled "feathering" technique. When combined with our randomly blended top layer, it results in a shingle with exceptional depth and dimension — **and a striking look unmatched by any other brand.**

But don't just take our word for it. See for yourself. When you compare Timberline® High Definition® Shingles to typical architectural shingles, it's easy to see why they'll look sharper and more beautiful on your roof — while enhancing the resale value of your home.

Whatever you're looking for, there's a Timberline® Shingle to fit your taste and your budget.

See the difference...

Another Major Brand



Timberline® High Definition® Shingles



The color blends on Timberline® High Definition® Shingles are sharp and well defined — to give your roof maximum dimensionality and depth. Color shown: Hickory

Here's What Female Homeowners Have To Say...

GAF recently received the Women's Choice Award for being the brand that is a "gold standard when it comes to meeting high standards of quality and service," as rated by female homeowners in the U.S.



2012 - 2018
WOMEN'S CHOICE AWARD
9 OUT OF 10 CUSTOMER RECOMMENDED
ROOFING PRODUCTS

*See GAF Shingle & Accessory Ltd. Warranty for complete coverage and restrictions. The word "Lifetime" refers to the length of coverage provided by the GAF Shingle & Accessory Ltd. Warranty and means as long as the original individual owner(s) of a single-family detached residence [or the second owner(s) in certain circumstances] owns the property where the shingles are installed. For owners/structures not meeting the above criteria, Lifetime coverage is not applicable.

**Timberline® High Definition® Shingles have earned the prestigious Good Housekeeping Seal (applicable in U.S. only).



Timberline HD[®] Shingles



Timberline Ultra HD[®] and Timberline HD[®] Shingles Provide These Unique Benefits

- **Beautiful Look...** Features GAF proprietary color blends and enhanced shadow effect for a genuine wood-shake look.
- **Highest Roofing Fire Rating...** UL Class A, Listed to ANSI/UL 790.
- **Advanced Algae Resistance...** New StainGuard Plus™ Time-Release Technology provides long-lasting protection against blue-green algae stains (applies to Timberline Ultra HD[®] Shingles only).¹
- **High Performance...** Designed with Advanced Protection[®] Shingle Technology, which reduces the use of natural resources while providing excellent protection for your home (visit gaf.com/aps to learn more).
- **Stays In Place...** Dura Grip™ Adhesive seals each shingle tightly and reduces the risk of shingle blow-off. Shingles are warranted to withstand winds up to 130 mph (209 km/h).²
- **Peace Of Mind...** Lifetime Ltd. transferable warranty with Smart Choice[®] Protection (non-prorated material and installation labor coverage) for the first ten years.³
- **Perfect Finishing Touch...** Use Timbertex[®] Premium Ridge Cap Shingles or Ridglass[®] Premium Ridge Cap Shingles.⁴

¹ StainGuard Plus™ Time-Release Technology and 25-year limited warranty against blue-green algae discoloration available only on Timberline Ultra HD[®] Shingles sold in packages bearing the StainGuard Plus™ logo. Does not apply to Timberline Ultra HD[®] Reflector Series™ Shingles. See GAF Shingle & Accessory Ltd. Warranty for complete coverage and restrictions.

² This wind speed coverage requires special installation; see GAF Shingle & Accessory Ltd. Warranty for details.

³ See GAF Shingle & Accessory Ltd. Warranty for complete coverage and restrictions. The word "Lifetime" refers to the length of coverage provided by the GAF Shingle & Accessory Ltd. Warranty and means as long as the original individual owner(s) of a single-family detached residence (or the second owner(s) in certain circumstances) owns the property where the shingles are installed. For owners/structures not meeting the above criteria, Lifetime coverage is not applicable.

⁴ These products are not available in all areas. See www.gaf.com/ridgecapavailability for details.

NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

Shown: Timberline HD[®]
in Mission Brown
(Regional color)

Timberline[®] HD: North America's #1-selling shingle

More homeowners in North America rely on **Timberline HD[®]** Shingles than any other brand. They offer just the right combination of beauty, performance, and reliability — and are the best value in roofing today.

When you install Timberline HD[®] Shingles, you'll be installing the brand that professional installers rely on for its rugged, dependable performance — thanks to **Advanced Protection[®] Shingle Technology**. And you'll be getting your own genuine Timberline[®] roof!

TIMBERLINE HD
LIFETIME HIGH DEFINITION SHINGLES



SLATE

Slate is a cool gray with a beautiful green undertone — exactly like real slate. This shade coordinates well with both grays and greens on the cool side as well as with white, cream, and ivory exteriors. A roof done in Slate will add a warm and inviting feel to any home.

“The High Definition® (Timberline®) Shingles really added to the look of the house. Knowing the product is backed by a company like GAF is comforting.”

—David Cusumano, Collegeville, PA

GAF

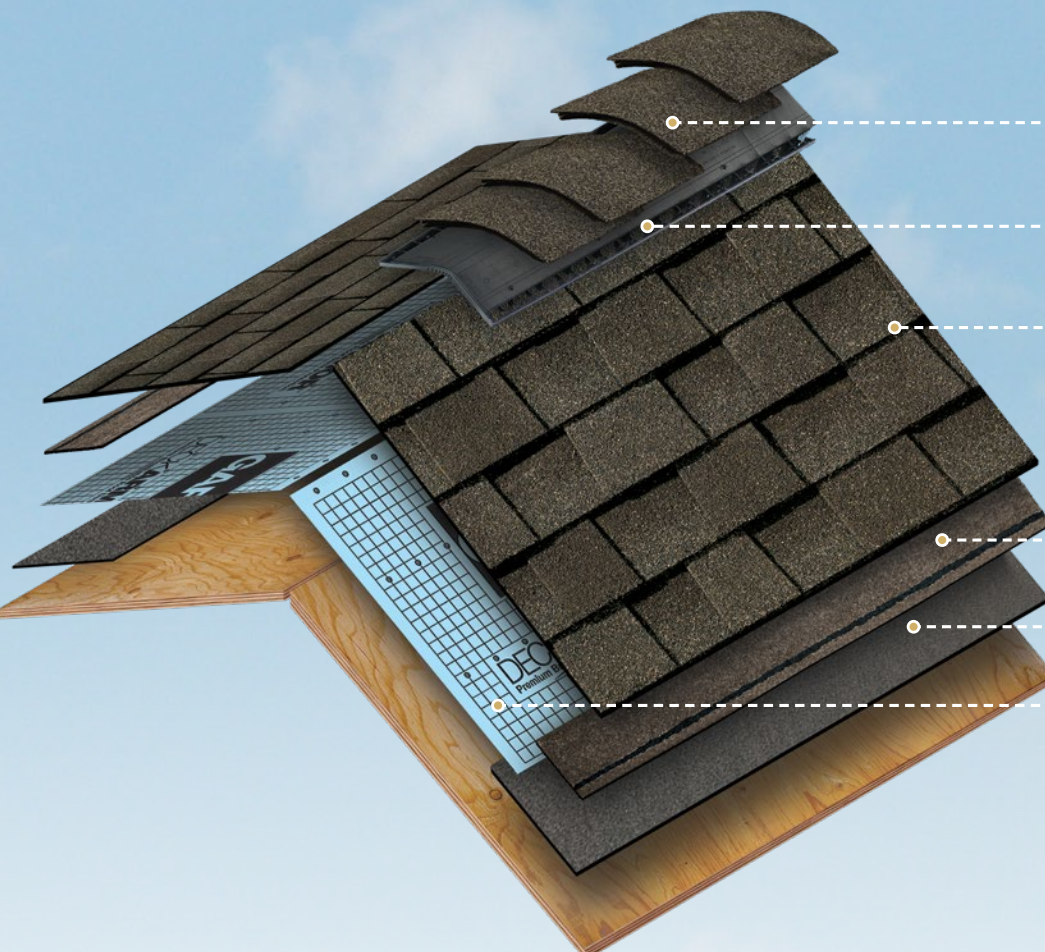
NOTE: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.



LIFETIME* ROOFING SYSTEM

When you install any GAF Lifetime Shingle and at least 3 qualifying GAF accessories, you'll automatically get a Lifetime Ltd. warranty on your shingles and all qualifying GAF accessories.*

Durable Protection. Lasting Beauty.



Ridge Cap Shingles

The finishing touch that helps defend against leaks at the hips and ridges



Cobra® Attic Ventilation

Helps reduce attic moisture and heat



Lifetime Shingles*

Beautify & protect for years to come



Starter Strip Shingles

Helps guard against shingle blow-offs



Leak Barrier

Helps prevent leaks caused by wind-driven rain and ice dams



Roof Deck Protection

Helps shield the roof deck from moisture infiltration



*See GAF Shingle & Accessory Ltd. Warranty for complete coverage and restrictions. The word "Lifetime" refers to the length of coverage provided by the GAF Shingle & Accessory Ltd. Warranty and means as long as the original individual owner(s) of a single-family detached residence (or the second owner(s) in certain circumstances) owns the property where the shingles and accessories are installed. For owners/structures not meeting the above criteria, Lifetime coverage is not applicable. Lifetime Ltd. warranty on accessories requires the use of at least three qualifying GAF accessories and the use of Lifetime Shingles.

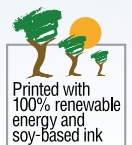
To learn more about why Advanced Protection® Shingles are your best choice, visit gaf.com/aps.

The GAF Lifetime Roofing System has earned the prestigious Good Housekeeping Seal (applicable in U.S. only).

SALES OFFICES:

NORTHEAST 717-866-8392	CENTRAL 630-241-5380	SOUTHEAST 813-622-3962	SOUTHWEST 972-851-0500	WEST 951-360-4200 800-445-9330	CANADA 855-492-8085	WORLD HQ 973-628-3000
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Timberline HD® Specs

ABOUT ([HTTPS://WWW.GAF.COM/EN-US/ROOFING-PRODUCTS/RESIDENTIAL-ROOFING-PRODUCTS/SHINGLES/TIMBERLINE/ARCHITECTURAL/TIMBERLINE-HD](https://www.gaf.com/en-us/roofing-products/residential-roofing-products/shingles/timberline/architectural/timberline-hd))

SPECS ([HTTPS://WWW.GAF.COM/EN-US/ROOFING-PRODUCTS/RESIDENTIAL-ROOFING-PRODUCTS/SHINGLES/TIMBERLINE/ARCHITECTURAL/TIMBERLINE-HD/SPECIFICATIONS](https://www.gaf.com/en-us/roofing-products/residential-roofing-products/shingles/timberline/architectural/timberline-hd/specifications))

DOCS
PRODUCTS/SI

SPECIFICATIONS

AWARDS & RECOGNITION	Good Housekeeping Rated
DIMENSIONS (SP)	13 1/4" x 39 3/8" (336.55 mm x 1 m)
STAINGUARD®	Yes
ALGAE STAIN PROTECTION	StainGuard® Protection
APPROX. NAILS/SQ	256
\$ - \$\$\$	\$\$
DURABILITY & TOUGHNESS	Advanced Protection Shingle with GAF Dura Grip Adhesive
EXPOSURE	5 5/8" (144 mm)
EXTREME WEATHER IMPACT RATED	No
FIRE RATING	Highest Rating - Class A
MATERIAL	Fiberglass Asphalt Construction
WIND WARRANTY	130 mph
WIND RATING	130 mph
SHINGLE STYLE	Wood-Shake Look
SHINGLE TYPE	Architectural Shingles
AWARDS & RECOGNITION:	Good Housekeeping Rated
DIMENSIONS (SP):	13 1/4" x 39 3/8" (336.55 mm x 1 m)
STAINGUARD®:	Yes
ALGAE STAIN PROTECTION:	StainGuard® Protection
APPROX. NAILS/SQ:	256
\$ - \$\$\$:	\$\$
DURABILITY & TOUGHNESS:	Advanced Protection Shingle with GAF Dura Grip Adhesive
EXPOSURE:	5 5/8" (144 mm)

SPECIFICATIONS

EXTREME WEATHER IMPACT RATED: No

FIRE RATING: Highest Rating - Class A

MATERIAL: Fiberglass Asphalt Construction

WIND WARRANTY: 130 mph

WIND RATING: 130 mph

SHINGLE STYLE: Wood-Shake Look

SHINGLE TYPE: Architectural Shingles

CODES & APPLICABLE STANDARDS

FBC State of Florida approved

ICC ESR-1475

ICC AC438 ESR-3267 - Obtained ESR 3267 evaluation from ICC Evaluation Services based on compliance with the requirements of AC438, an acceptance criteria established by ICC Evaluation Services to evaluate asphalt shingles that contains performance tests in addition to those required by the building code. (ICC Evaluation Services provides technical evaluations of building products that directly address the issue of code compliance. Building inspectors use these evaluation reports to help determine code compliance and enforce building regulations.)

MIAMI-DADE COUNTY Miami-Dade County Product Control approved

TDI Texas Department of Insurance listed

FBC: State of Florida approved

ICC : ESR-1475

ICC AC438: ESR-3267 - Obtained ESR 3267 evaluation from ICC Evaluation Services based on compliance with the requirements of AC438, an acceptance criteria established by ICC Evaluation Services to evaluate asphalt shingles that contains performance tests in addition to those required by the building code. (ICC Evaluation Services provides technical evaluations of building products that directly address the issue of code compliance. Building inspectors use these evaluation reports to help determine code compliance and enforce building regulations.)

MIAMI-DADE COUNTY: Miami-Dade County Product Control approved

TDI: Texas Department of Insurance listed

TESTING METHODS

ASTM D3018 Yes

TESTING METHODS

ASTM D3161	Class F
ASTM D3462	Yes - Meets ASTM D3462
ASTM D7158	Yes (Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture).
CSA A123.5	Yes - Refers to shingles sold only in Canada.
TAS 100-95	Yes
UL 790	Class A
UL 997	Modified to 110 mph
ASTM D3018: Yes	
ASTM D3161: Class F	
ASTM D3462: Yes - Meets ASTM D3462	
ASTM D7158: Yes (Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture).	
CSA A123.5: Yes - Refers to shingles sold only in Canada.	
TAS 100-95: Yes	
UL 790: Class A	
UL 997: Modified to 110 mph	

ENERGY RATING

ENERGY STAR® CERTIFIED (U.S. ONLY)	No
TITLE 24 (CALIFORNIA ENERGY COMMISSION)	No
MIAMI 21 (FLORIDA BUILDING CODE)	Yes
ENERGY STAR® CERTIFIED (U.S. ONLY): No	
TITLE 24 (CALIFORNIA ENERGY COMMISSION): No	
MIAMI 21 (FLORIDA BUILDING CODE): Yes	

SHIPPING AND PACKAGING

APPROX. PIECES/SQ	64
APPROX. BUNDLES/SQ	3
APPROX. PIECES/SQ: 64	
APPROX. BUNDLES/SQ: 3	

Get automatic Lifetime Protection on your entire GAF roofing system

When you install any GAF Lifetime Shingle and at least 3 qualifying GAF accessories, you'll automatically get a Lifetime limited warranty on your shingles and all qualifying GAF accessories*.





15 Reardon Road - Medford, MA - 02155

Tel.: (781) 396-0070 - Fax: (781) 396-8890

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Double Lock Panels - Standing Seam Metal Roofing

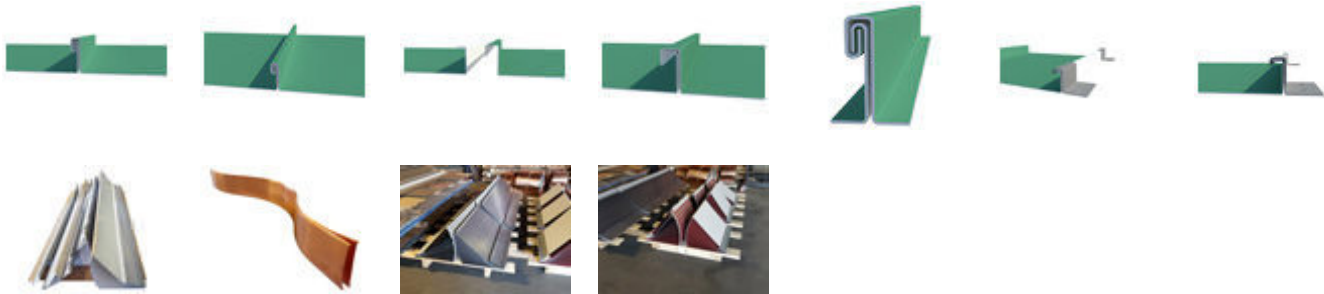
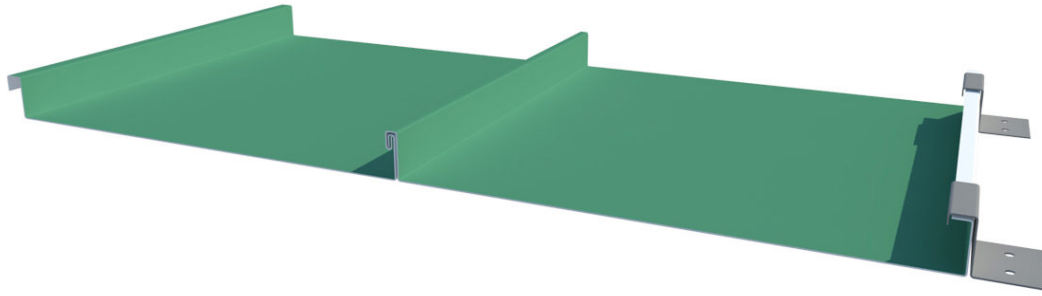
Available in many different materials. Custom made on site to any length.

Available in 1", 1.5" and 2". Standing seam roof panels are the classic standard. Long before machines were around to extrude panels, contractors all over the world were installing this definitive look. The 1.5" and 2" relatives of this beautiful panel were developed to create greater shadow lines, to add structural strength, and to provide greater integrity in low sloped situations.

Installation is done via using clips to secure the panels down to a roof and folding the seams twice, hence the name "double lock panels".

Riverside has panel machines that will run panels on site to our customers in different sizes, materials and lengths. We also offer radius and tapered panels that can be manufactured at our location.

Riverside also offers installation services in Massachusetts and parts of New England



Product Details

Panel Type	Lock size	Radius	Tapered
Corrugated roof and wall panels	N/A	N/A	N/A
Flat lock roof panels	0.5" to 1"	Available	Available
Standing seam roof panels	1", 1.5" & 2"	Available	Available
Snap lock roof panels	1.75"	N/A	Available

Metal Roof Panel Sizes:

Coil stocks for panels, are usually available in 18", 20" and 24", as seen in the chart below. Although we can custom slit coils to other dimensions, then offering panels at different widths, the previously mentioned are more easily

available with a smaller cost. For odd jobs, we can also manually bend panels up to 12' in length on our Autobrakes, matching any odd width profiles.

Finished Roof Panel sizes and Drawings

Panel Type	18" Coil Stock	20" Coil Stock	24" Coil Stock	Drawing
Standing seam roof panels (1" Height)	15" Finished Panel	17" Finished Panel	21" Finished Panel	PDF
Standing seam roof panels (1.5" Height)	14" Finished Panel	16" Finished Panel	20" Finished Panel	PDF
Standing seam roof panels (2" Height)	12" Finished Panel	14" Finished Panel	18" Finished Panel	PDF
Snap lock roof panels (1.75" Height)	12" Finished Panel	14" Finished Panel	18" Finished Panel	PDF

Metal roofing products are commonly fabricated with these materials:

[REQUEST A QUOTE](#)



[Click here for a full list of colors and materials](#)

Riverside offers some of the accessories necessary for installation of standing seam, wall and flat lock roof panels such as clips. Although we don't sell [tools](#), we have a list on our website of some of our favorite tools and can point you in the right direction for purchasing or renting tools and for buying other accessories.

Edge and Flashing Metal:

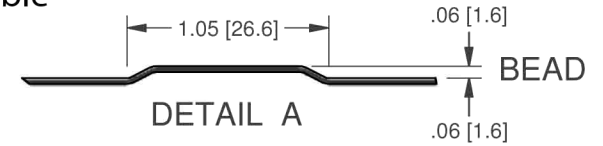
Metal Roof systems don't consist only of panels. Edge and Flashing metal is required to start and finish the job, and Riverside manufacturers all that is necessary for your project. Normally, to start a job, you will need at least drip edge, to hook your panels onto, J channel (or Z channel if you prefer), either to accept a Ridge Cap, or a Head Wall Flashing and in most cases, you will also also need Valley Flashing.

- Baldy cleat
- Cornice work
- Drip edge
- Gravel stop
- Head wall
- Hook strip
- J channel
- Parapet wall cap
- Ridge cap
- Step flashing
- Valley flashing
- Z channel

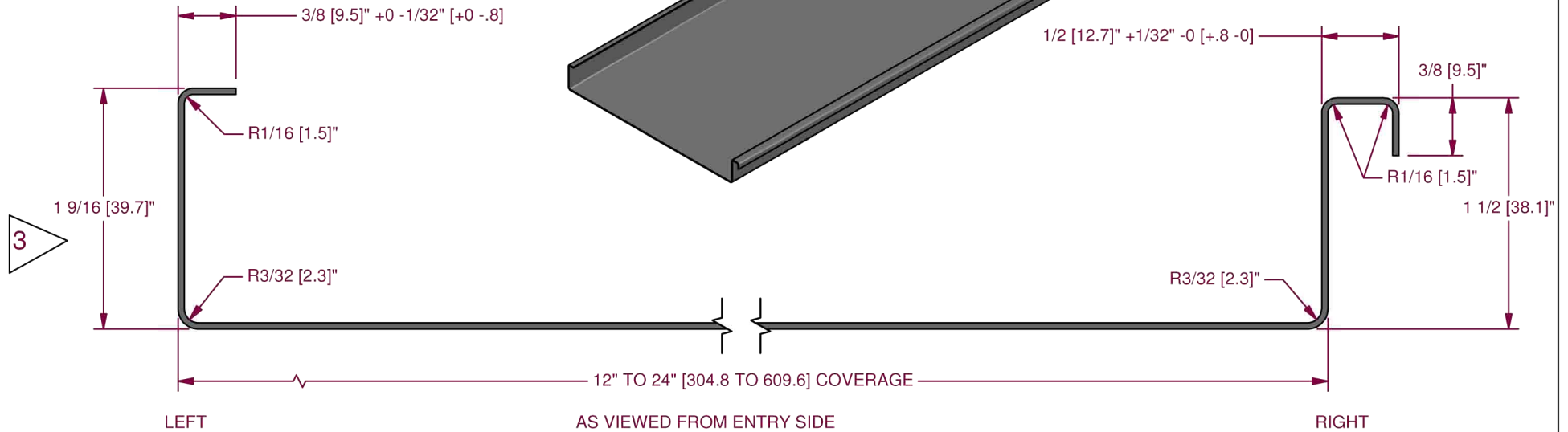
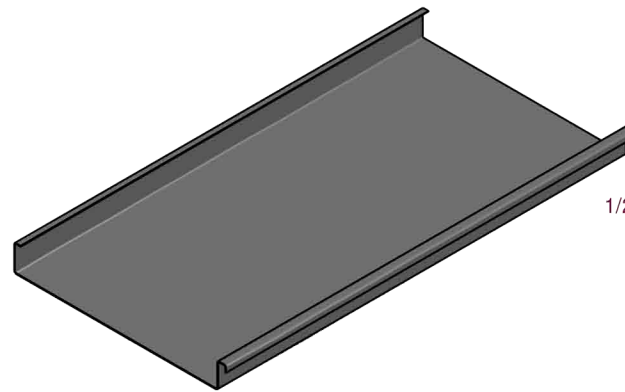
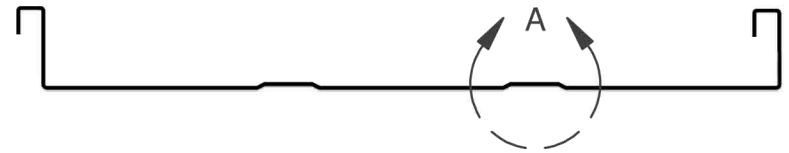


riversidesheetmetal.net

Bead(s) available



RR1



- NOTES:
 1. MATERIAL USAGE: APPROX. 4" [101.6]
 2. DUAL DIMENSIONS: Inch [mm]

MATERIAL PAINTED STEEL/PAINTED ALUMINUM/COPPER				FINISH NONE	
REVISION HISTORY	REV	ECR NO.	DATE	RELEASED BY	TOLERANCES
	0	REDRAWN	01/17/2008	JD	.XX = ± .01
	1	ADDED R DIM	07/02/2009	JD	.XXX = ± .005
	2	ADDED TOL.	07/22/2011	JD	FRACTION = ± 1/32"
	3	LEG WAS 1"	05/02/2012	JD	ANGLE = ± 1/2'

NEW TECH MACHINERY CORP.

SS150 PANEL PROFILE

SP5-150P

SHEET 1 OF 1 REVISION 3

Description: Aluminum intake shutters

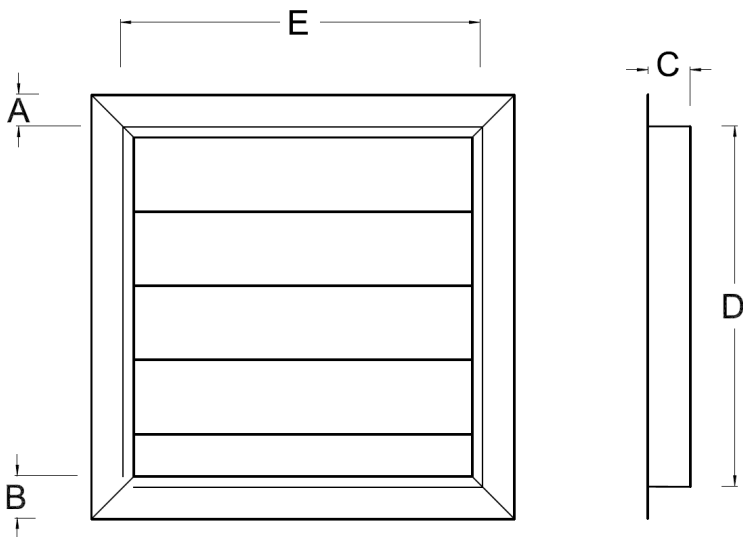
Sizes: 12" - 60"

Features:

- Counter-weighted to reduce opening pressure
- Galv steel reinforced corners
- Heavy ga. aluminum construction
- Optional automatic shutter opening kit—SMKIT



Model:	Shutter Size	Approx. Intake CFM	Rough-In Opening	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Box Wt. Lbs.	Box Dims.
SA12	12"	550	12.5x12.5	1.5	2.0	2.0	12	12	2	17x17x2.5
SA16	16"	900	16.5x16.5	1.5	2.0	2.0	16	16	3	21x21x2.5
SA18	18"	1250	18.5x18.5	1.5	2.0	2.0	18	18	4	23x23x2.5
SA20	20"	1550	20.5x20.5	1.5	2.0	2.0	20	20	4	25x25x2.5
SA24	24"	2200	24.5x24.5	1.5	2.0	2.0	24	24	6	29x29x2.5
SA30	30"	3500	30.5x30.5	1.5	2.0	2.0	30	30	8	35x35x2.5
SA36	36"	5050	36.5x36.5	1.5	2.0	2.0	36	36	12	41x41x2.5
SA40	40"	6200	40.5x40.5	1.5	2.0	2.0	40	40	14	45x45x2.5
SA42	42"	6900	42.5x42.5	1.5	2.0	2.0	42	42	16	47x47x2.5
SA48	48"	9000	48.5x48.5	1.5	2.0	2.0	48	48	24	53x53x2.5
SA54	54"	11300	54.5x54.5	1.5	2.0	2.0	54	54	28	59x59x2.5
SA60	60"	14000	60.5x60.5	1.5	2.0	2.0	60	60	36	65x65x2.5



Galvanized Box Fans—Direct Drive Instruction Manual

Model Numbers Covered:

116192, 115237, 116189



Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the equipment described within this manual. Carefully follow all safety information.

Save this manual for future reference.

Model # _____

Purchase Date: _____

Date: 04/27/18

Form: HV0022 Version 3

Getting Started



Tools/Materials Needed:

- Drill/drill bits
- 5/16" nut driver
- Construction screws
- Caulk or sealant

Contents:

- Galvanized box fan(1)
- Instruction manual(1)

Inspection:

After unpacking your fan, carefully inspect for any damage that may have occurred during transit. Inspect for loose, missing or damaged parts. If there is physical damage to any parts of the fan, a freight claim must be filed with the carrier. Check to assure that all bolts, screws and set screws are securely tightened and have not become loose during transit. Retighten as required. Rotate propeller by hand to assure it turns freely.



General Safety Instructions

Danger: Before installing or servicing, always lock out and tag power source. Do not rely on a switch as the only means of disconnecting power. Failure to disconnect power can result in fire, electrical shock or serious injury. Motor will restart without warning after thermal protector trips. Do not touch an operating motor as it may be hot enough to cause injury. Do not place any body parts or objects in fan or drive components while fan is connected to a power source.



Warning:

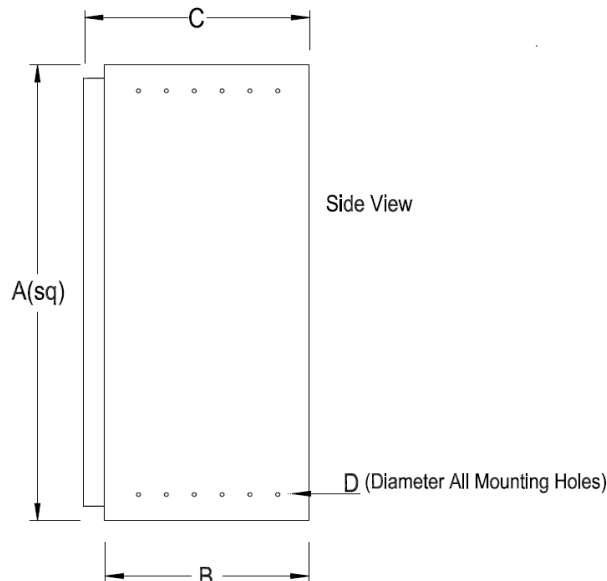
1. Read and follow all instructions, cautions, dangers and warnings. Failure to do so could result in personal injury, death or property damage.
2. Make sure the electrical power source conforms to the requirement of the fan(s) as well as local codes.
3. Electrical connections, installation and maintenance must be done by qualified electrical personnel in accordance with all applicable codes and ordinances.
4. Unit must be adequately grounded.
5. To reduce the risk of fire or electrical shock, do not expose this fan to water.
6. Do not touch electrically live components.
7. Free rotation of the propeller is critical. It must not touch any part of the venturi, framework or drive components.
8. Assure that all power cords do not come in contact with any sharp edges, hot surfaces or chemicals. Immediately replace any damaged cords.



Caution: OSHA requires OSHA compliant guards when fan is installed within 7ft of the floor or working level.

Specifications

Model	Prop Dia.	Dimension (In.)				Rough-in Opening		Ship. Wt	Ship. Dims.
		A	B	C	D	Height	Width		
116192	36"	40 1/8	14	-	3/8	40 3/4	40 3/4	118	44x18x47
116189	36"	40 1/8	14	17	3/8	40 3/4	40 3/4	138	48x18x47
115237	48"	52 1/8	17	-	3/8	52 7/8	52 7/8	165	56x20x58



Performance

Model	HP	F.L.A.	Volt.	Ph	Hz	Motor RPM	CFM(115/230v)				CFM/Watt(115/230v)				Db 0.00" SP
							0.00" SP	0.05" SP	0.10" SP	0.15" SP	0.00" SP	0.05" SP	0.10" SP	0.15" SP	
116192	1/2	5.2/2.8-2.6	115/208-230	1	60	825	11,077	10,217	9,381	8,557	21.1	18.6	16.4	14.5	76
116189	1/2	5.2/2.8-2.6	115/208-230	1	60	825	10,525	9,698	8,910	8,130	20.6	18.2	15.9	14	77
115237	1	11.0/5.5	115/230	1	60	850	18,926	17,481	15,973	14,256	19.9	17.8	15.8	13.7	80

Fan Installation

For framing dimensions, refer to rough-in opening height and width shown in the specifications above.

Position the fan for desired airflow. Air will discharge on the side of the fan facing the propeller.

Assure the fan is fastened securely in the opening to avoid excess "rattling" or vibration using proper fasteners. Fasteners not included.

Refer to motor nameplate for wiring diagram.



Caution: Before operating your new fan, check blade for proper torque, check all fasteners for tightness and assure screens and/or shutters are securely in place.

Maintenance

Periodic maintenance schedules should be set to assure reliability and performance of the fan. This maintenance should include inspection of all fasteners, propeller torque and proper cleaning of the complete fan assembly.

Check for excessive vibration while fan is running.

Periodically inspect and tighten all set screws and hardware.

Assure all mounting hardware, chains, etc. are properly secured.

Motors feature permanently sealed ball bearings and require no further lubrication.

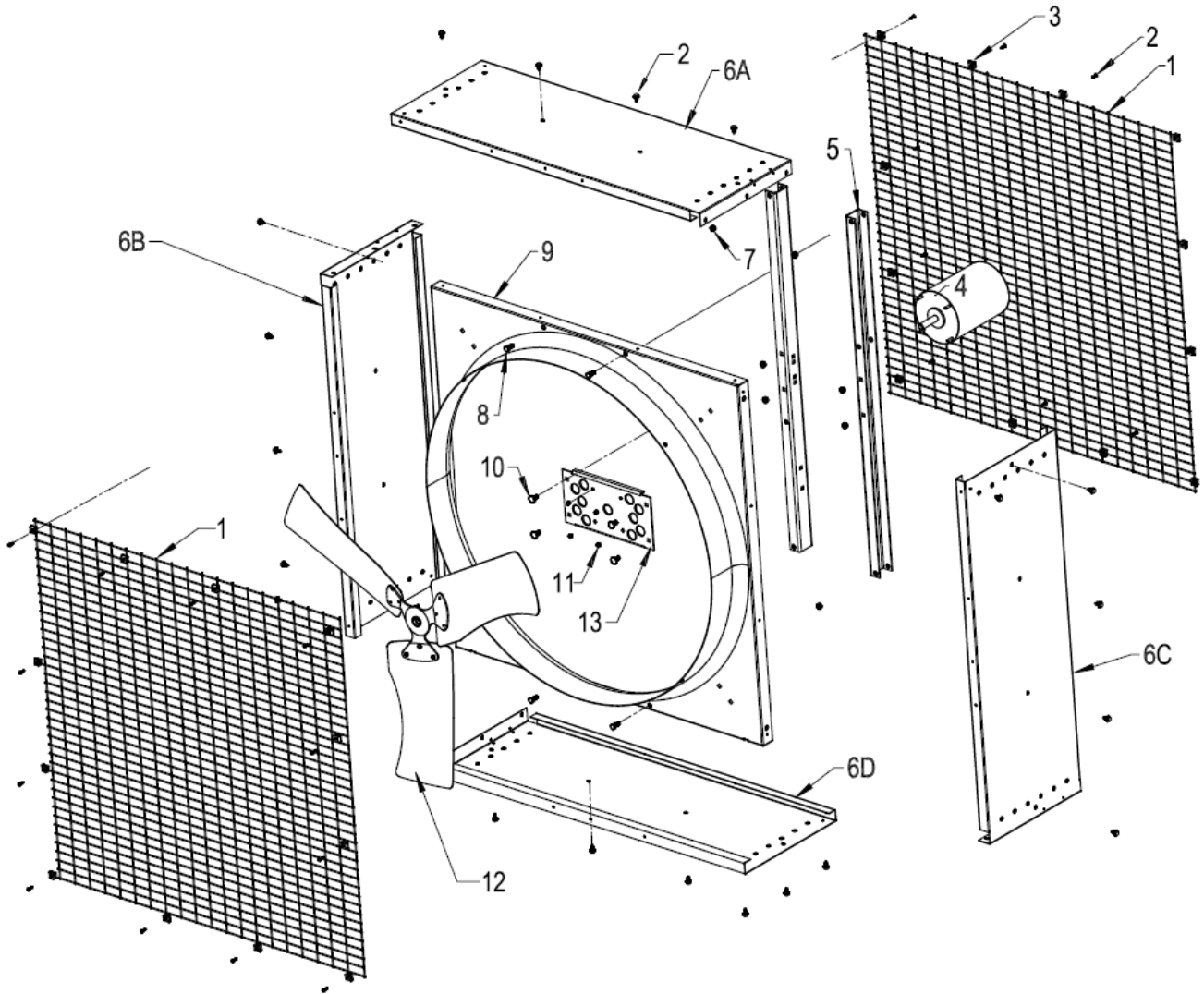
The fan propeller should be periodically cleaned to assure proper balance and performance.

Troubleshooting Guide

Symptom	Possible Cause(s)	Corrective Action
Fan will not start	<ol style="list-style-type: none"> 1. Tripped circuit breaker 2. Defective motor 3. Incorrectly wired 4. Electricity turned off 	<ol style="list-style-type: none"> 1. Reset circuit breaker 2. Repair or replace 3. Shut off power, check for proper connections 4. Contact local power company
Excessive noise or vibration	<ol style="list-style-type: none"> 1. Blade is hitting housing 2. Blade is bent 3. Fan not securely anchored 4. Bad/noisy bearings 	<ol style="list-style-type: none"> 1. Free blade of obstruction 2. Replace blade 3. Secure properly 4. Replace motor
Insufficient airflow	<ol style="list-style-type: none"> 1. Incorrect voltage applied 2. Defective motor 3. Propeller is damaged 4. Blocked Airflow 5. Not enough intake air 6. Fan is dirty 	<ol style="list-style-type: none"> 1. Wire properly 2. Replace motor 3. Replace propeller 4. Remove obstructions 5. Add additional air intake openings 6. Clean fan guards/screens, motor and propeller
Motor overheats or trips out	<ol style="list-style-type: none"> 1. Over/under line voltage 2. Defective motor 3. Fan is dirty. 4. Not enough intake air 	<ol style="list-style-type: none"> 1. Contact local power company 2. Replace motor 3. Clean fan guards/screens, motor and propeller 4. Add additional air intake openings

Repair Parts Illustration

Note: Aluminum discharge shutter not shown.



Ref No	Description	116192	116189	115237	Qty
1	Intake & discharge screen	36SCREEN-N	36SCREEN-N	48SCREEN-N	2,1
3	Clip for screen	CLIP-SC	CLIP-SC	CLIP-SC	24
4	Motor	B370-8E	B370-8E	A750-8VE	1
5	Upright frame piece	N/A	N/A	N/A	2
6(A,B,C,D)	Side panel piece	N/A	N/A	N/A	4
9	Venturi panel	N/A	N/A	N/A	1
12	Propeller	9001481	9001481	9001567	1
13	Motor mounting plate	N/A	N/A	N/A	1
-	Alum discharge shutter	N/A	SA36DX	N/A	1