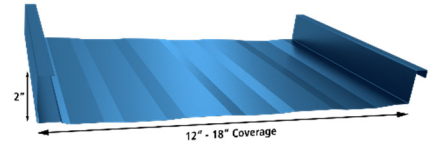


## MegaLoc™



Gulf Coast Supply & Manufacturing 14229 SW 2<sup>nd</sup> Pl G30, Newberry FL 32669

**Product Description:** Mechanical seam panel with nominal rib height of 2".

**Product Material:** 24ga (min) steel (corrosion resistant per FBC 1507.4.3 where required), or nominally 0.032" aluminum or thicker.

**Fastener:** #10 x 1-inch fastener *Compliant with FBC 1506.6 where required.*

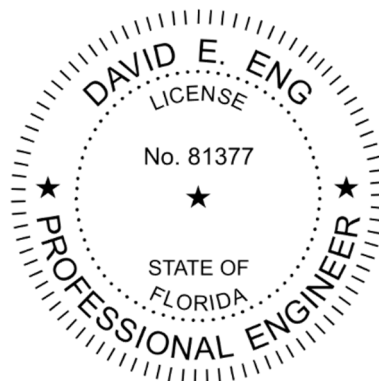
### Maximum Allowable Loads & Installation Requirements:

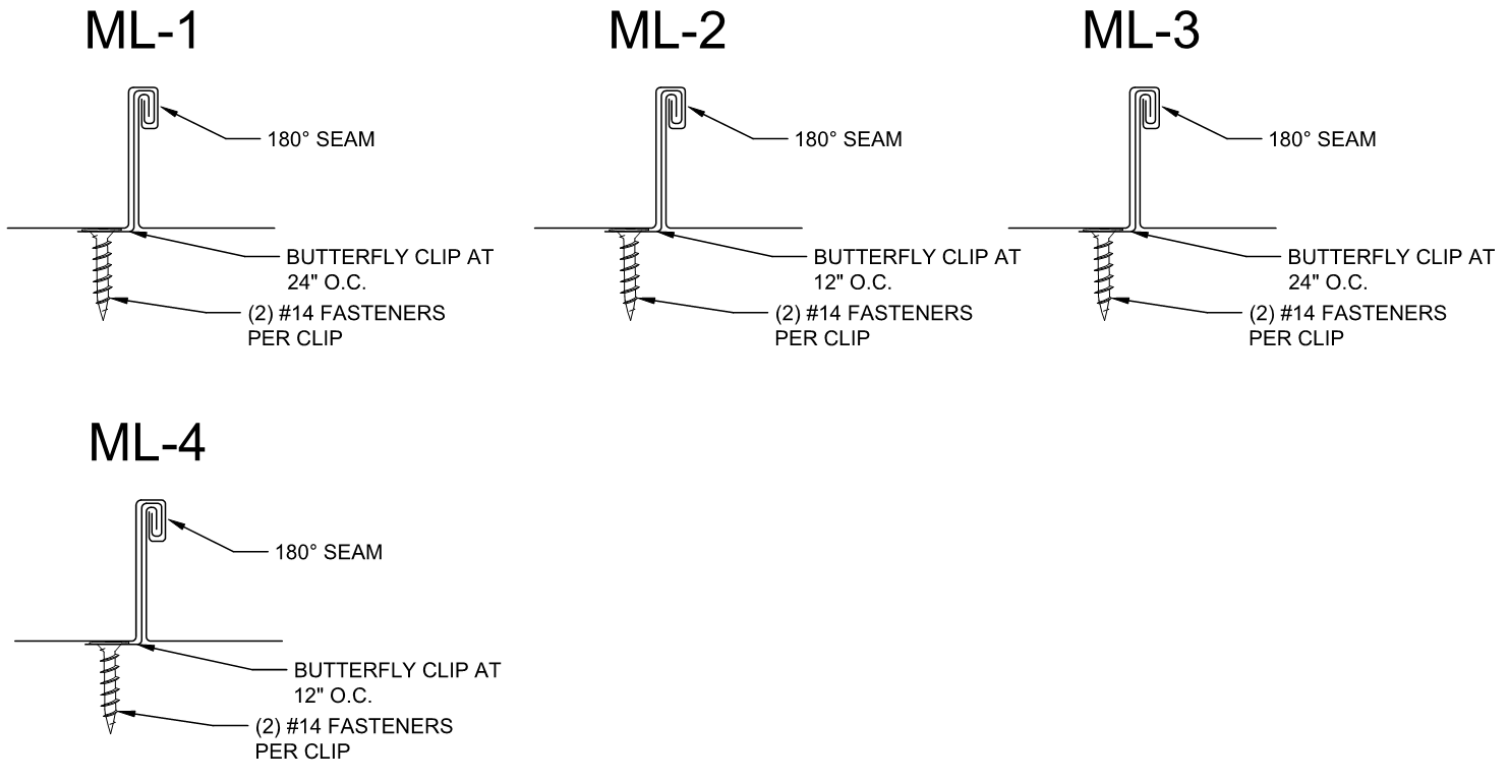
System No	Deck/Substrate	Roof Panel	Panel Attachment	Allowable Pressure (psf)
ML-1	22ga (min) steel deck	Nominally 0.032" aluminum (or thicker) MegaLoc panel with 18" (max) coverage with 18ga stiffener (0.5" x 2") and seamed to 180°.	Butterfly clip with 2"x4.5" 18ga base and 5" long 22ga upper. (2) #14 fasteners per clip, clips at 24" o.c.	-114.25
ML-2	22ga (min) steel deck	Nominally 0.032" aluminum (or thicker) MegaLoc panel with 18" (max) coverage with 18ga stiffener (0.5" x 2") and seamed to 180°.	Butterfly clip with 2"x4.5" 18ga base and 5" long 22ga upper. (2) #14 fasteners per clip, clips at 12" o.c.	-166.75
ML-3	22ga (min) steel deck	24ga (min) MegaLoc panel with 22.5" (max) coverage and seamed to 180°.	Butterfly clip with 2"x4.5" 18ga base and 5" long 22ga upper. (2) #14 fasteners per clip, clips at 24" o.c.	-148
ML-4	22ga (min) steel deck	24ga (min) MegaLoc panel with 22.5" (max) coverage and seamed to 180°.	Butterfly clip with 2"x4.5" 18ga base and 5" long 22ga upper. (3) #14 fasteners per clip, clips at 12" o.c.	-181.75

*A factor of safety of 2 has been applied.*

### Evaluated by:

David Eng, PE  
Timberlake Cove, LLC  
1317 Edgewater Dr, Ste 2339  
Orlando FL  
FL PE 81377 | FL CA 37675  
[www.TimberLakeCove.com](http://www.TimberLakeCove.com)





**Underlayment:** Comply with local building code or FBC 1507.1.1/1518.2 where required.

**Slope:** Comply with local building code or FBC 1507.4.2/FBC 1515.2 where required.

**Re-Roofing:** This panel may be installed over a single layer of existing shingles as permitted by local building code or FBC 1511/1521, provided the existing roof meets the conditions required by the applicable code.

**Fire Barrier:** Comply with FBC 1516.1 and 1516.2 where required. Optional where not required by code.

**Insulation (optional):** ISO board or other insulation is permitted between steel deck and panels. Increase fastener length to penetrate ¼" past underside of substrate. Comply with FBC 1508 and 1519.11 where required.

**Compliance Statement:** This product as described has demonstrated compliance with Florida Building Code 2023, 1504.3.2 (non-HVHZ) and 1518.9.1/1523.6.5.2.4 (HVHZ), as required by FL Rule 61G20-3, method 1D.

This product as described has been tested and demonstrated compliance with:

- UL580 – Test for Uplift Resistance of Roof Assemblies
- UL 1897 – Uplift test for roof covering systems
- TAS 125 – Standard Requirements for Metal Roofing Systems
- TAS 100 - Wind and Wind-Driven Rain

**Technical Documentation:**

- Architectural Testing/Intertek (fka Hurricane Test Lab, TST 1527), TAS 125/UL 580, reports 0527-1210-09, 0527-0709-09.
- Fenestration Testing Lab (TST-4129), TAS 100, report 10-2076

**Design Process:** Compare the maximum allowable loads to the ASD uplift pressures for the project to determine sufficiency and installation requirements. Alternatively, as an option, the load tables in this report may be used to identify the pressure required for roofs within the parameters described.

For roofs outside of the listed parameters, design wind loads shall be determined as required by FBC 1609, ASCE 7, or other design code in force, using allowable stress. These load tables are based on ASCE 7-22. Use of these tables assumes that the structure is: Enclosed, partially enclosed, or partially open and conforms to wind-borne debris provisions and is a regular shaped building and is not subject to across-wind loading, vortex shedding, or instability; nor does it have a site location for which channeling or buffeting warrant consideration

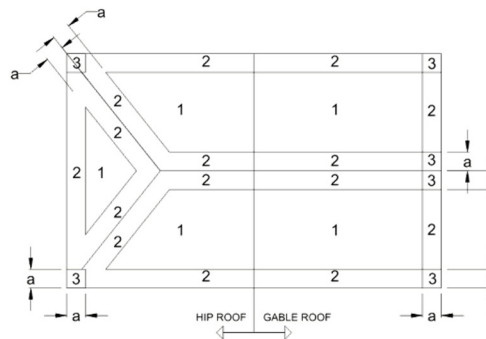
Engineering analysis may be completed by other licensed engineers for project specific approval by local authorities having jurisdiction.

**Certification of Independence:** David Eng, PE and Timberlake Cove, LLC do not have, nor will acquire a financial interest in any company manufacturing or distributing products under this evaluation. The same entities do not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

**Exclusions and Limitations:** Design of deck and roof structure (to include attachment of substrate) shall be completed by others. Fire classification and shear diaphragm design are outside the scope of this evaluation. Accelerated weathering/salt spray is outside the scope of this evaluation.

This report is limited to compliance with structural wind load requirements of FBC 1504.3.2, as required by Rule 61G20-3. Neither Timberlake Cove nor the manufacturer shall be responsible for any conclusions, interpretations, or designs made by others based on this evaluation report. This report is limited solely to documenting compliance with Rule 61G20-3, and makes no express or implied warranty regarding performance of this product. Installation shall be subject to the local building code and authority having jurisdiction; this report shall not be construed to supersede local codes in force.

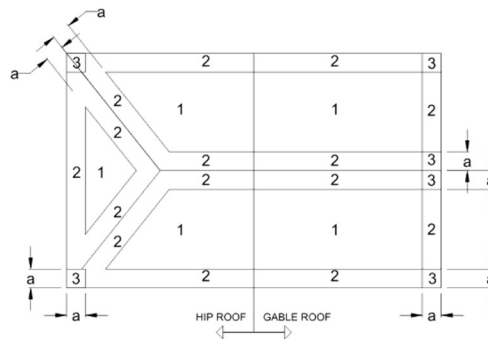
Allowable Design Pressures required for Gable and Hip Roofs in Exposure B with roof slope between 2:12 and 12:12											
Building Type	Zone	Mean Roof Height (ft)	Ultimate Windspeed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed or Partially Open	1	20	-25.4	-29.8	-34.6	-39.7	-45.2	-51.0	-57.2	-63.7	-70.6
		25	-27.1	-31.7	-36.8	-42.3	-48.1	-54.3	-60.9	-67.8	-75.1
		30	-28.7	-33.7	-39.0	-44.8	-51.0	-57.6	-64.6	-71.9	-79.7
		40	-30.3	-35.6	-41.3	-47.4	-53.9	-60.9	-68.2	-76.0	-84.2
		50	-32.4	-38.0	-44.1	-50.6	-57.6	-65.0	-72.9	-81.2	-89.9
		60	-34.0	-39.9	-46.3	-53.2	-60.5	-68.3	-76.5	-85.3	-94.5
	2	20	-33.6	-39.4	-45.7	-52.5	-59.7	-67.4	-75.5	-84.2	-93.3
		25	-35.7	-41.9	-48.6	-55.8	-63.5	-71.7	-80.4	-89.6	-99.3
		30	-37.9	-44.5	-51.6	-59.2	-67.4	-76.1	-85.3	-95.0	-105.3
		40	-40.1	-47.0	-54.5	-62.6	-71.2	-80.4	-90.2	-100.4	-111.3
		50	-42.8	-50.2	-58.2	-66.8	-76.0	-85.8	-96.2	-107.2	-118.8
		60	-44.9	-52.7	-61.2	-70.2	-79.9	-90.2	-101.1	-112.7	-124.8
	3	20	-44.1	-51.7	-60.0	-68.8	-78.3	-88.4	-99.1	-110.5	-122.4
		25	-46.9	-55.0	-63.8	-73.3	-83.4	-94.1	-105.5	-117.6	-130.3
		30	-49.7	-58.4	-67.7	-77.7	-88.4	-99.8	-111.9	-124.7	-138.2
		40	-52.6	-61.7	-71.6	-82.2	-93.5	-105.5	-118.3	-131.8	-146.1
		50	-56.1	-65.9	-76.4	-87.7	-99.8	-112.7	-126.3	-140.7	-156.0
		60	-59.0	-69.2	-80.3	-92.2	-104.9	-118.4	-132.7	-147.9	-163.8
Partially Enclosed	1	20	-29.7	-34.9	-40.5	-46.4	-52.8	-59.7	-66.9	-74.5	-82.6
		25	-31.6	-37.1	-43.1	-49.4	-56.3	-63.5	-71.2	-79.3	-87.9
		30	-33.6	-39.4	-45.7	-52.4	-59.7	-67.4	-75.5	-84.1	-93.2
		40	-35.5	-41.6	-48.3	-55.4	-63.1	-71.2	-79.8	-88.9	-98.5
		50	-37.9	-44.4	-51.6	-59.2	-67.3	-76.0	-85.2	-94.9	-105.2
		60	-39.8	-46.7	-54.2	-62.2	-70.7	-79.9	-89.5	-99.8	-110.5
	2	20	-37.9	-44.5	-51.6	-59.2	-67.3	-76.0	-85.2	-95.0	-105.2
		25	-40.3	-47.3	-54.9	-63.0	-71.7	-80.9	-90.7	-101.1	-112.0
		30	-42.8	-50.2	-58.2	-66.8	-76.0	-85.8	-96.2	-107.2	-118.8
		40	-45.2	-53.1	-61.5	-70.6	-80.4	-90.7	-101.7	-113.4	-125.6
		50	-48.3	-56.7	-65.7	-75.4	-85.8	-96.9	-108.6	-121.0	-134.1
		60	-50.7	-59.5	-69.0	-79.2	-90.2	-101.8	-114.1	-127.1	-140.9
	3	20	-48.4	-56.8	-65.8	-75.6	-86.0	-97.1	-108.8	-121.3	-134.4
		25	-51.5	-60.4	-70.1	-80.5	-91.5	-103.3	-115.9	-129.1	-143.0
		30	-54.6	-64.1	-74.3	-85.3	-97.1	-109.6	-122.9	-136.9	-151.7
		40	-57.7	-67.8	-78.6	-90.2	-102.6	-115.9	-129.9	-144.7	-160.4
		50	-61.6	-72.3	-83.9	-96.3	-109.6	-123.7	-138.7	-154.5	-171.2
		60	-64.8	-76.0	-88.1	-101.2	-115.1	-130.0	-145.7	-162.3	-179.9



• 10% OF LEAST HORIZONTAL DIMENSION OR 0.4L, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 3FT (0.9M), OR AS DETERMINED BY DESIGN OR OTHER APPLICABLE CODE.

ROOF ZONES FOR GENERIC BUILDING

Allowable Design Pressures required for Gable and Hip Roofs in Exposure C with roof slope between 2:12 and 12:12											
Building Type	Zone	Mean Roof Height (ft)	Ultimate Windspeed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed or Partially Open	1	20	-36.9	-43.3	-50.2	-57.6	-65.6	-74.0	-83.0	-92.5	-102.5
		25	-38.5	-45.2	-52.4	-60.2	-68.5	-77.3	-86.7	-96.6	-107.0
		30	-40.2	-47.1	-54.7	-62.8	-71.4	-80.6	-90.4	-100.7	-111.6
		40	-42.6	-50.0	-58.0	-66.6	-75.8	-85.5	-95.9	-106.9	-118.4
		50	-44.7	-52.4	-60.8	-69.8	-79.4	-89.7	-100.5	-112.0	-124.1
		60	-46.3	-54.4	-63.0	-72.4	-82.3	-92.9	-104.2	-116.1	-128.6
	2	20	-48.7	-57.2	-66.3	-76.1	-86.6	-97.8	-109.6	-122.2	-135.4
		25	-50.9	-59.7	-69.3	-79.5	-90.5	-102.1	-114.5	-127.6	-141.4
		30	-53.1	-62.3	-72.2	-82.9	-94.3	-106.5	-119.4	-133.0	-147.4
		40	-56.3	-66.1	-76.6	-88.0	-100.1	-113.0	-126.7	-141.2	-156.4
		50	-59.0	-69.3	-80.3	-92.2	-104.9	-118.4	-132.8	-148.0	-163.9
		60	-61.2	-71.8	-83.3	-95.6	-108.8	-122.8	-137.7	-153.4	-170.0
	3	20	-64.0	-75.1	-87.1	-99.9	-113.7	-128.4	-143.9	-160.3	-177.7
		25	-66.8	-78.4	-90.9	-104.4	-118.8	-134.1	-150.3	-167.5	-185.6
		30	-69.6	-81.7	-94.8	-108.8	-123.8	-139.8	-156.7	-174.6	-193.5
		40	-73.9	-86.7	-100.6	-115.5	-131.4	-148.3	-166.3	-185.3	-205.3
		50	-77.5	-90.9	-105.4	-121.0	-137.7	-155.5	-174.3	-194.2	-215.2
		60	-80.3	-94.2	-109.3	-125.5	-142.8	-161.2	-180.7	-201.3	-223.1
Partially Enclosed	1	20	-43.1	-50.6	-58.7	-67.4	-76.7	-86.6	-97.1	-108.2	-119.9
		25	-45.1	-52.9	-61.3	-70.4	-80.1	-90.4	-101.4	-113.0	-125.2
		30	-47.0	-55.1	-63.9	-73.4	-83.5	-94.3	-105.7	-117.8	-130.5
		40	-49.9	-58.5	-67.9	-77.9	-88.6	-100.1	-112.2	-125.0	-138.5
		50	-52.3	-61.3	-71.1	-81.7	-92.9	-104.9	-117.6	-131.0	-145.2
		60	-54.2	-63.6	-73.7	-84.6	-96.3	-108.7	-121.9	-135.8	-150.5
	2	20	-55.0	-64.5	-74.9	-85.9	-97.8	-110.4	-123.7	-137.9	-152.8
		25	-57.4	-67.4	-78.2	-89.7	-102.1	-115.3	-129.2	-144.0	-159.5
		30	-59.9	-70.3	-81.5	-93.6	-106.5	-120.2	-134.7	-150.1	-166.3
		40	-63.5	-74.6	-86.5	-99.3	-113.0	-127.5	-143.0	-159.3	-176.5
		50	-66.6	-78.2	-90.7	-104.1	-118.4	-133.7	-149.9	-167.0	-185.0
		60	-69.0	-81.0	-94.0	-107.9	-122.7	-138.6	-155.4	-173.1	-191.8
	3	20	-70.2	-82.4	-95.6	-109.7	-124.8	-140.9	-158.0	-176.0	-195.1
		25	-73.3	-86.1	-99.8	-114.6	-130.4	-147.2	-165.0	-183.9	-203.7
		30	-76.5	-89.7	-104.1	-119.5	-135.9	-153.5	-172.0	-191.7	-212.4
		40	-81.1	-95.2	-110.4	-126.8	-144.3	-162.9	-182.6	-203.4	-225.4
		50	-85.0	-99.8	-115.8	-132.9	-151.2	-170.7	-191.4	-213.2	-236.2
		60	-88.2	-103.5	-120.0	-137.8	-156.7	-176.9	-198.4	-221.0	-244.9

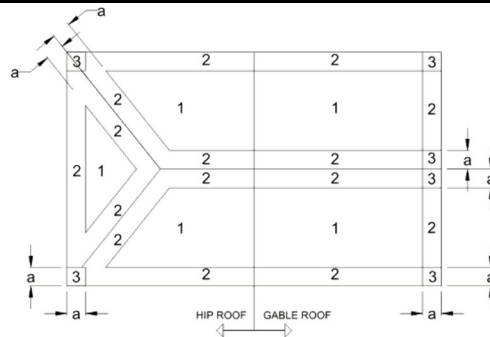


※ 10% OF LEAST HORIZONTAL DIMENSION OR 3' (a), WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 3FT (0.9M), OR AS DETERMINED BY DESIGN OR OTHER APPLICABLE CODE.

ROOF ZONES FOR GENERIC BUILDING

*Allowable Design Pressures required for Gable and Hip Roofs in Exposure D with roof slope between 2:12 and 12:12*

Building Type	Zone	Mean Roof Height (ft)	Ultimate Windspeed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed or Partially Open	1	20	-44.3	-51.9	-60.2	-69.2	-78.7	-88.8	-99.6	-111.0	-123.0
		25	-45.9	-53.9	-62.5	-71.7	-81.6	-92.1	-103.3	-115.1	-127.5
		30	-47.5	-55.8	-64.7	-74.3	-84.5	-95.4	-107.0	-119.2	-132.1
		40	-50.0	-58.7	-68.1	-78.1	-88.9	-100.4	-112.5	-125.4	-138.9
		50	-52.1	-61.1	-70.8	-81.3	-92.5	-104.5	-117.1	-130.5	-144.6
		60	-53.7	-63.0	-73.1	-83.9	-95.5	-107.8	-120.8	-134.6	-149.1
	2	20	-58.5	-68.6	-79.6	-91.4	-104.0	-117.4	-131.6	-146.6	-162.4
		25	-60.6	-71.2	-82.5	-94.8	-107.8	-121.7	-136.4	-152.0	-168.5
		30	-62.8	-73.7	-85.5	-98.1	-111.7	-126.1	-141.3	-157.5	-174.5
		40	-66.1	-77.5	-89.9	-103.2	-117.4	-132.6	-148.6	-165.6	-183.5
		50	-68.8	-80.7	-93.6	-107.4	-122.2	-138.0	-154.7	-172.4	-191.0
		60	-70.9	-83.2	-96.5	-110.8	-126.1	-142.4	-159.6	-177.8	-197.0
	3	20	-76.8	-90.1	-104.5	-119.9	-136.4	-154.0	-172.7	-192.4	-213.2
		25	-79.6	-93.4	-108.3	-124.4	-141.5	-159.7	-179.1	-199.5	-221.1
		30	-82.4	-96.7	-112.2	-128.8	-146.6	-165.4	-185.5	-206.7	-229.0
		40	-86.7	-101.8	-118.0	-135.5	-154.1	-174.0	-195.1	-217.4	-240.8
		50	-90.3	-105.9	-122.8	-141.0	-160.5	-181.1	-203.1	-226.3	-250.7
		60	-93.1	-109.3	-126.7	-145.5	-165.5	-186.8	-209.5	-233.4	-258.6
Partially Enclosed	1	20	-51.8	-60.8	-70.5	-80.9	-92.0	-103.9	-116.5	-129.8	-143.8
		25	-53.7	-63.0	-73.1	-83.9	-95.5	-107.8	-120.8	-134.6	-149.2
		30	-55.6	-65.3	-75.7	-86.9	-98.9	-111.6	-125.1	-139.4	-154.5
		40	-58.5	-68.6	-79.6	-91.4	-104.0	-117.4	-131.6	-146.6	-162.5
		50	-60.9	-71.5	-82.9	-95.1	-108.2	-122.2	-137.0	-152.6	-169.1
		60	-62.8	-73.7	-85.5	-98.1	-111.7	-126.0	-141.3	-157.4	-174.5
	2	20	-66.0	-77.4	-89.8	-103.1	-117.3	-132.4	-148.5	-165.4	-183.3
		25	-68.4	-80.3	-93.1	-106.9	-121.7	-137.3	-154.0	-171.6	-190.1
		30	-70.9	-83.2	-96.5	-110.7	-126.0	-142.2	-159.5	-177.7	-196.9
		40	-74.5	-87.5	-101.5	-116.5	-132.5	-149.6	-167.7	-186.9	-207.1
		50	-77.6	-91.1	-105.6	-121.2	-138.0	-155.7	-174.6	-194.5	-215.6
		60	-80.0	-93.9	-108.9	-125.1	-142.3	-160.6	-180.1	-200.7	-222.3
	3	20	-84.3	-98.9	-114.7	-131.7	-149.8	-169.1	-189.6	-211.2	-234.1
		25	-87.4	-102.6	-118.9	-136.5	-155.4	-175.4	-196.6	-219.1	-242.7
		30	-90.5	-106.2	-123.2	-141.4	-160.9	-181.6	-203.6	-226.9	-251.4
		40	-95.2	-111.7	-129.6	-148.7	-169.2	-191.0	-214.2	-238.6	-264.4
		50	-99.1	-116.3	-134.9	-154.8	-176.2	-198.9	-222.9	-248.4	-275.2
		60	-102.2	-120.0	-139.1	-159.7	-181.7	-205.1	-230.0	-256.2	-283.9



a: 10% OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 3FT (0.9M), OR AS DETERMINED BY REGION OR OTHER APPLICABLE CODE.

ROOF ZONES FOR GENERIC BUILDING