

previous calendar year: 1

Report to the Joint Legislative Committee On Local Government

Pursuant to S.L. 2017-130, Sec. 4(c)
BUILDING CODE REGULATORY REFORM

Name of Inspection Department:	Buncombe County Permits & Inspections
Name of Person Preparing Report:	Matt Stone, Director of Permits & Inspections
Signature of Person:	Matt Stre
Date of Report:	12/31/2018
Submit this report electronically to Legislative Analysis Division, a	· · · · · · · · · · · · · · · · · · ·
**Please attach any written procedures that m provisions of this law and the outco	· · · · · · · · · · · · · · · · · · ·
inspection decisions made by the department' (counties) or 4(b) (cities) for further details about Check to indicate that this process established conducts an initial review of inspectors' decision or 4(b) (cities) for further details about this red Check to indicate that this process included with follow when a permit holder or applicant requirement. ✓ Check to indicate that this organization includes the name, phone number and email of the supplication.	a procedure whereby the inspector's supervisor ons. Refer to S.L. 2017-130, Section 4(a) (counties) quirement. ritten procedures for the inspections department to ests an internal review of an inspector's decision. or 4(b) (cities) for further details about this es in or with each permit issued by the department (pervisor or each inspector and (ii) a notice of cess. Refer to S.L. 2017-130, Section 4(a) (counties)



BUNCOMBE COUNTY PERMITS & INSPECTIONS 30 VALLEY STREET ASHEVILLE, NC 28801

INFORMAL INTERNAL REVIEW PROCESS FORM

	222 707 7225
*Name/Phone number	Calvin Hensley 828-707-2325
*Address	224 Thompson St, Ste. 166, Asheville, NC 28793
*Case Number	BLD2018-02390
*Email	trw@ioa.com
*Address of Inspection	6 Bowling Green Road
*Date of inspection	10/22/2018
*Type of inspection	Foundation
*Name of Inspector	Harley Stewart
*Inspection result	PASS – inspection passed but inspector noted violation involving sill plates would have to be addressed by Framing Inspection
*Supporting evidence vs Inspection decision (Attach supporting documents)	Reference Attached Documentation
*this form submitted via (hand delivery/email/fax)	Hand delivered
	Remainder of form to be completed by Supervisor
Supervisor name/number	MATT STONE 823-250-5364
Date of Submittal	12/09/18 Date of review /2/11/18
Summary of findings	12/09/18 Date of review 12/11/18 Appleaues as ALTERNATE METHOD OF EQUIVALENT PROTECTION ALAINST DECAY BASED ON ENGINEERS REPORT (REF. ATTACHED)
Date sent to Applicant	12/11/18
Wan Jaffan	12/9/16 Calvin Herritary
(Signature)	(Date) (Printed Name)

I UNDERSTAND MY REVIEW WILL BE NOT BE PROCESSED IF THIS FORM IS NOT COMPLETE, ALL AREAS WITH "*" WERE COMPLETED BY MYSELF. I ALSO UNDERSTAND A DECISION WILL BE REACHED WITHIN A REASONABLE AMOUNT OF TIME AS PER North Carolina G.S. 143-140 (a)

BUNCOMBE COUNTY PERMITS & INSPECTIONS APPLICATION FOR BUILDING AND ZONING PERMIT One and Two Family Dwellings and Accessory Buildings

Case Number: BLD2018-02390

Ridge Law: N

Lot: 3

PIN#: 963342572000000	Township: AVERYS CREEK	ON BOWLING OPERN TO	Lot size(acres): 0.32
Directions: 191 E TO BO	WLING GREEN WAY IN ARDEN - RT C	ON BOWLING GREEN - LC	ON LI
Type of Use: Single Famil	ly Site Built	Intended Use:	
Type of Work: Residentia		Foundation: C	•
Number of Bedrooms: 3		Total Cost: \$15	
Total Heated Sq Ft: 1575	·	Basement Unh	leated Sq Ft:
Other Sq Ft:	Garage/Carport Sq Ft: 600		
Owner: LEONARD MERR		Phone	Phone:
2407 ANDERS DR HENDI	ERSONVILLE, NC 28791		
Lien Agent: FIDELITY NA	TIONAL TITLE CO, LLC	Phone: 888690738	4 Cell: 8886907384
19 W HARGETT ST SUIT	E 507 RALEIGH, NC 27601		
Building Contractor:	USDOMEBUILDERS LLC DBA	A USD BUILDERS	State License# 76189
Electrical Contractor:	WATTS ELECTRIC		State License# 24351
Mechanical Contractor:	HENSLEYS REFRIGERATION	NHEATING & AIR	State License# 30726
Plumbing Contractor:	LRONARD MERRELL JR		State License# 32488
Utilities: Electric: Type of Heat: Water: Sewer:	Duke Energy : Ĥeat Pump Outside HVA Public Water MSD	C Unit: Yes	Gas Inspection?: No
Zoning Designation: R-1	Inc	corporated Area:	ETJ:
	itate Overlay: N Blueridge Parkway O	verlay: <u>N</u> Steep Slope:	N Protected Ridges; N
Flood Hazard Zone:	FIRM#:	Flood Hazard Perr	nit Number:
	Lot Size: 0.32		Watershed: <u>N</u>
1			Date:
	oval by:		Date:
Comments:		m 200 1300 1000	<i>• •</i>
Plan Review: Date Re	viewed: 1/4/2018 Date Appro	oved: 1/4/000	Approved By:
and lightless for a negocit and increasion.	t he/she is the contractor and authorized agent of the owner of work described above. All work will be done in accordent to commenced and inspected within six months of the date inspections are performed to	of issue. This permit will also expire if	na toest istyr siid teriliaddiis alid illat ii is toldcisioc
Owner Contraction of State of	ed By Issued C	BLUE Date that have taken place up your property.	Purchasing a building permit does not fulfill the
/T	owner to inform the tax department of changes. Failure of example of changes: new construction, additions, garages, to the Buncombe County Tax Department, Real Estate Di	demolitions, mobile home placement of	r removal, etc.1

Application Date: 09/14/2018

Site Location: 6 BOWLING GREEN LN

Subdivision/Park Name: WINDY MEADOW

Application Name: LEONARD MERRELL - NEW SFSB W/ ATTACHED GARAGE

BUNCOMBE COUNTY	<u> PERMIT APPLICA</u>	ATION	41
Site Location: 6 Bowling GREEN LANE AND ANDERINE	PIA	# 9633425726	00000
Township: Bunconha Subdivision/Park Name: Windy	1000001	# 3 Ridge Law:	
Directions: 191 RAST From AShrvilla to	The sales		dear
Than Kt om Bowling Brain way			
THEN IT OF DELLAND GETTY	COL GIVE NOTE FEE		
Circle Permit Type: Single Family Townhouse Duplex Mobile Home	Modular Home Commerc	ial Multi-Family Other_	111
11 0m 101 1 11 11 11 11 11 11 11 11 11 11 11	Upfit/Repair Change of Use Stories # of Bedra	, ,	
Project Description: Total Cost of Project: 4 150,000 # of Total Heated SQ, FT. SQ. FT. of 1	Stories U # of Bedre New Construction (or Renovated	Area) # of Bathroo	ns <u> </u>
		ber	P
Basement Finished: Yes / No Total Heated SQ, FT, of Basement_		ented, SQ, FT, of Basement	
Mobile Homes Only: Year Manufacturer Manufacturer	p	Electric Fi	
Address: Set-up Contractor:	City	State,7	lp
Address:	City	State2	ip
Owner: LEONAND MERABL		Phone # (828) 7	707-2325
	City Hulle	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Applicant (If Different from Owner):		Phone#	•
Address:	City	StateZ	lp
Contractor: USD Buildras	NCGC LIC# 76/89	7 Phone # (828)	7/3-1/20
Address: 224 Thompson St Sait 166	City Haile	State 1/2	ip 28393
Lien Agent Name: Findality MAtion Al Title	Campanyll	Phone # \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	10-7384
Address: 19 w HARGETT St, Suith 307	_ City RALXIGH	State DL	Cip 27601
Sub-Contractors: Electrical Kanny Waffs		ne Lie # A.C. 243	
Mechanical Aprom Hungliny		te Lic # <u>11.C. 30.7</u>	
Plumbing M&WI PLumbing	Sta	ne Lic # <u>NC, 324</u>	88
Sprinkler	Sta	ite Lic #	
Other * NEED WALLONK	, Deal st	ite Lic #	
Utilities - Circle Applicable Type(s)			0
Electric: Duke Progress Energy Duke Power French	Broad BMC Haywood EM	1C Other	
Fossil Fuel: Natural Gas LP Gas Oil	Heat Pump/AC	Other	
Water: Private Well (New) or (Existing) Community W	Vell Public Water	*	
Sewer: Septic Tank (New) Septic Tunk (Existing)	MSD Sewer	Other	
The undersigned hereby certifies that he/she is the contractor and authorized agent hereby makes application for a permit and inspection of work described above. A regulations and that it is understood that this permit will expire if work is not com	Il work will be done in accordant menced and inspected within six	e with all applicable Federal, S	tate and local laws and
if work stops at any time (a 12 months or more and no inspections are performed	to verify work in progress.	1 11	1 1000
1/13	118 Car	Vin G HENE	Svex Sr.
Contractor / Owner Signature	te Pr	Inted Name	
OFFICE USE ONLY: Zoning Approva	erdam Biltmore Forest_	Limestone Wea	verville Woodfin
Flood Hazard Zond FIRM# Grading/Erosion Perm		Disturbed Area	Watershed

CASE#	

BUNCOMBE COUNTY PERMIT APPLICATION

Site Location:			wn.			PIN	· #		
Township:	Subdi	vision/Park Nar	ne:			Lot	# Rid	ige Law:	
Directions:									
			•						
Circle Permit Type: S	ingle Family	Townhouse	Duplex	Mobile Home	Modular H	ome Commerc	ial Multi-Family	y Other	
Type of Work: Circl Use of Property: (Circl Project Description:	le Applicable Ty cle One) Owne	r Occupied	Addition Rental	Remodel Sale	Upfit/Repair	Change of Use	Moved House	Garage (Att / Det)	SQ. FT
Total Cost of Project: _ Total Heated SQ. FT					f Stories	# of Bedro	ooms# Area)	of Bathrooms	
Foundation - Circle Ap		Basement		awlspace			her		
Basement Finished: Y				of Basement			eated. SQ. FT. of Ba		
Mobile Homes Only:	Year		Manufac	turer		Size_		Electric Furnace –	Yes / No
Mobile Home Dealer: _ Address:						P		Zip	
Set-up Contractor:					Phone #_		Lic #		
Address:					City		State	Zip	
Owner:							Phone #		
Address:	· · · · · · · · · · · · · · · · · · ·				City		State	Zip	
Applicant (If Different	from Owner):						Phone #		
Address:					City	···	State	Zip	
Contractor:					NCGC	LIC#	Phone #		
Address:					City		State	Zip	
Lien Agent Name:							Phone #		
Address :					City		Star	teZip	
Sub-Contractors: Elect	trical					Sta	te Lic #		
Mec	hanical					Sta	e Lic #		
Plun	nbing					Sta	te Lic #		1
Sprii	nkler		w			Sta	te Lic #		
Othe	er					Sta	te Lic #		
Utilities – Circle Applie	cable Type(s)								
Electric:	Duke Energy F	rogress	Duke Pow	er French	Broad EMC	Haywood EM	C Other		
Fossil Fuel:	Natural Gas	LP Gas		Oil	Н	eat Pump/AC	Other		***************************************
Water:	Private Well (New) or (Existi	ng)	Community W	ell Pu	blic Water			
Sewer:	Septic Tank (N	lew) Sep	tic Tank (E	xisting)	MSD S	ewer	Other		
The undersigned hereby hereby makes application regulations and that it is if work stops at any time	on for a permit as s understood that	nd inspection o this permit wil	f work desc l expire if v	ribed above. Al	ll work will be nenced and ins	done in accordance pected within six r	with all applicable	Federal, State and	ocal laws and
Contractor / Owner Sig	nature			Dat	e	Pri	nted Name		
OFFICE USE ONLY:	Zoning Approx	rai - A	sheville ET	I Beave	erdam	Biltmore Forest	Limestone	Weaverville	Woodfin
Flood Hazard Zone:						Lot Size			atershed

INFORMAL REVIEW OF INSPECTION RESULT

Per North Carolina General Statute 143-140. Any person desiring to raise any question under this Article or under the North Carolina State Building Code shall be entitled to a technical interpretation from the appropriate enforcement agency, as designated in the preceding section. Upon request in writing by any such person, the enforcement agency through an appropriate official shall within a reasonable time provide a written interpretation, setting forth the facts found, the decision reached, and the reasons therefor. In the event of dissatisfaction with such decision, the person affected shall have the options of:

- (1) Appealing to the Building Code Council or
- (2) Appealing directly to the Superior Court as provided in G.S. 143-141.

(b) If an interpretation under this section or under G.S. 143-141(b) changes after a building permit is issued, the permit applicant may choose which version of the interpretation will apply to the permit, unless such a choice would cause harm to life or property.

In the event you as the applicant of the permit desire for an interpretation of an inspection result from the inspector from a decision based upon the North Carolina State Building Codes visit our website for the form entitled **INFORMAL INTERNAL REVIEW PROCESS FORM**. The form needs to be completed and any supporting documents attached, incomplete forms will not be processed. Once the form is completed you may deliver to the Buncombe County Permits & Inspections Office attention to: Inspections Supervisor: Matt Stone 828-250-5364 or matt.stone@buncombecounty.org

I have read and understand my right to appeal the inspection result of a North Carolina State Building Code decision based upon the decision of the field inspector. I also understand that incomplete forms will not be processed and this is a review of a code interpretation and NOT a complaint.

WILSON ENGINEERING CIVIL ENGINEERING/SITE DESIGN

PO Box 18563 ASHEVILLE, NC 28814 (828) 606-0034 trw@joa.com

November 30, 2018

Matt Stone
Buncombe County Permits and Inspections
30 Valley Street
Asheville, NC 28801

Re: Framing Plate - 6 Bowling Green Road

Permit No: BLD 2018-02390

Dear Matt:

On behalf of my client, who is the general contractor for the above referenced project, I am requesting that the AHJ consider the following as an alternative solution to framing plates installed on the project referenced above.

I have attached my report to the client regarding the framing plates and the absence of any treatment for decay in the lumber installed. I have researched the 2012 NCRBC, the 2012 ICCRBC, the commentary for the 2012 ICCRBC, and the 2012 NCBC.

The ICC residential code differs from the NC residential code in that the ICC code section R317 would allow untreated framing plates to be used "resting on a concrete or masonry foundation wall" provided that there is at least 8" of clearance from the ground. The commentary reflects this, commenting that "it is believed that 8" of clearance is sufficient to prevent the capillary rise of moisture to the bottom of the plate. Similarly, section 2304.11.2.2 of the North Carolina Building Code requires that "Wood framing members, including wood sheathing that rest on exterior foundation walls and are less than 8"from exposed earth shall be of naturally durable or preservative-treated wood." meaning that if you have more than 8" of clearance, the wood may be untreated.

Additionally, provision (1) in the NCRBC allows untreated sleepers and sills to be set on a concrete floor provided that the floor is separated from the ground by an approved impervious moisture barrier. This has always been a capillary barrier consisting of polyethylene and open graded aggregate.

It is my recommendation that the framing plates set on the top of a concrete foundation wall need not be treated provided that the clearance is sufficient to prevent the capillary rise in the concrete. With regard to the phrase "that rest on concrete or masonry exterior foundation walls, it would appear to me that if the framing plates are separated from the concrete or masonry with flashing or some other product, then the framing plate is not "resting" on the concrete or masonry. In this case, the plates were set on a Dow product called "Sill Seal". This product is specifically intended for use under framing plates and sills at the exterior bearing walls for reduction of infiltration of air.

It is my assessment that the framing plates are not "resting on" the concrete foundation walls because there is a foam sill seal between the plate and the foundation walls, there is sufficient clearance from the earth (greater than 8") in accordance with the North Carolina Building Code (section 2304.11.2.2), there is sufficient clearance from the earth (greater than 8") is in accordance with the ICC residential Code, and that the reasoning for the separation as articulated in the commentary is to prevent capillary rise from allowing moisture to be in contact with the lumber.

We request that the framing arrangement with the Dow "sill seal" under the framing plates together with a clearance of greater than 8" to the earth all around be approved as an alternative solution to the requirements of section R317.1(2) in this one case only. We look forward to your favorable consideration.

This report is limited to the observations and recommendations contained herein and offers no observations or conclusions not specifically contained in the report. If you have any questions or comments please feel free to call.

If you need further information please feel free to call.

Sincerely

Thomas R Wilson, PE

Cc: Calvin Hensley



PO BOX 18563 ASHEVILLE, NC 28814 (828) 606-0034 trw@joa.com

November 20, 2018

Calvin Hensley 638 Spartanburg Highway, Suite 345 Hendersonville, NC 28792

Re: Framing Plate – 6 Bowling Green Road Permit No: BLD 2018-02390

Dear Mr Hensley:

At your request, I have analyzed the issue regarding the lumber framing plate that is framed on a foam base sheet at the top of the foundation walls for the above referenced project.

Section R317.1 (2) requires that "All exterior sills and plates that rest on concrete or masonry exterior foundation walls." meet the requirements for protection of wood and wood based products against decay. This usually means that the plate is preservative treated lumber. Section 2304.11.2.2 of the North Carolina Building Code requires "Wood supported by exterior Foundation walls. Wood framing members, including wood sheathing that rest on exterior foundation walls and are less than 8"from exposed earth shall be of naturally durable or preservative-treated wood."

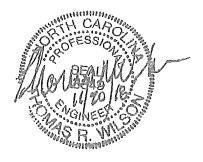
It is my interpretation that since the framing plates in question neither rest on concrete or masonry foundation walls and are framed a minimum of 8" above the exposed earth, that the installation meets the requirements of the North Carolina Building Code.

This report is limited to the observations and recommendations contained herein and offers no observations or conclusions not specifically contained in the report. If you have any questions or comments please feel free to call.

If you need further information please feel free to call.

Sincerely

Thomas R Wilson, PE



shown in Commentary Figure R317.1(2), must be used. The 8-inch (203 mm) clearance specified in this section has been determined to be large enough to prevent wetting of wood framing members under most circumstances.

Item 3: Concrete and masonry slabs that are in direct contact with the earth are very susceptible to moisture because of absorption of ground water. This can occur on interior slabs, as well as at the perimeter. In the case of wood sills or sleepers placed on concrete or masonry slabs, decay-resistant wood or pressure-treated wood is required where the slabs are in direct contact with the ground, as illustrated in Commentary Figure R317.1(3). Concrete that is fully separated from the ground by a vapor barrier is not in direct contact with earth.

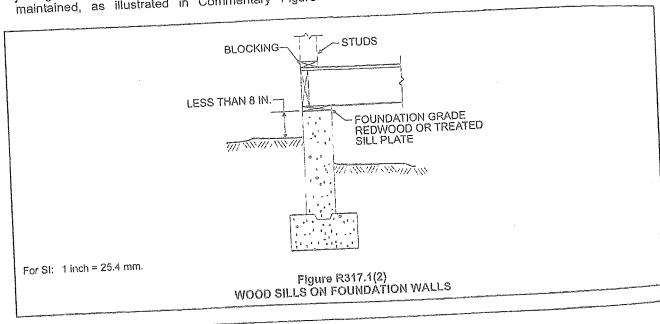
Item 4: A minimum 1/2-inch (12.7 mm) clearance along the top, sides and ends of wood members projecting into exterior masonry or concrete walls must be maintained, as illustrated in Commentary Figure

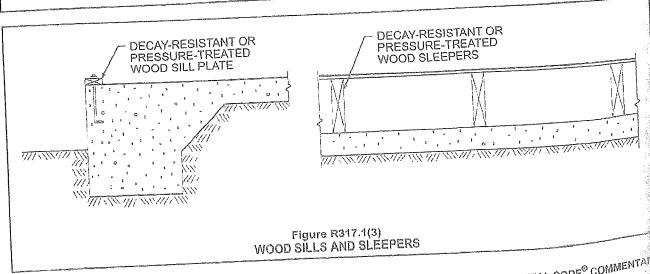
R317.1(4), unless the wood is treated or is of a species that is naturally decay resistant.

Item 5: Experience has shown that wood siding may extend below the sill plate to within 6 inches (152 mm) of the earth without decaying. Commentary Figure R317.1(5) shows the required minimum 6-inch (152 mm) clearance from the ground for wood siding, sheathing and wall framing on the exterior of a building. It should not be in direct contact with the foundation wall. If the sheathing is located over a concrete step or slab, the clearance may be reduced to 2 inches (51 mm) minimum.

Item 6: Concrete or masonry slabs that serve as roofs or floor systems that are exposed to the weather are very susceptible to moisture from rain or snow. If these slabs are supported by wood, the wood must be decay resistant or must be separated from the slabs by vapor barriers so there is not direct contact. This is similar to Item 3.

Item 7: When a basement area is finished, a com-





SECTION R317 PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY

pased products from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA UI for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA UI.

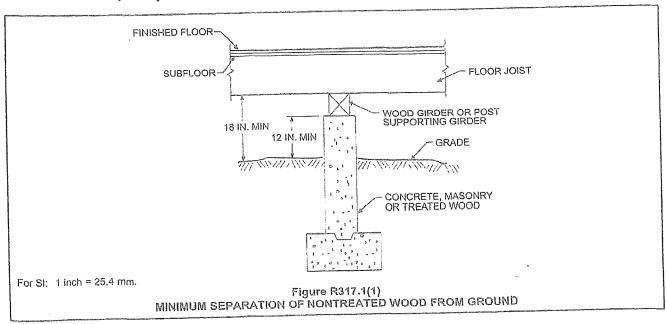
- 1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
- All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches (203 mm) from the exposed ground.
- Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
- The ends of wood girders entering exterior masonry or concrete walls having clearances of less than ½ inch (12.7 mm) on tops, sides and ends.
- 5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground or less than 2 inches (51 mm) measured vertically from concrete steps, porch slabs, patio slabs, and similar horizontal surfaces exposed to the weather.
- Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.

- 7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below *grade* except where an *approved* vapor retarder is applied between the wall and the furring strips or framing members.
- This section addresses the need for minimum protection against decay damage for wood members located in certain locations.

For those portions of a wood-framed structure that are subject to damage by decay, the code mandates that the lumber be pressure-preservative treated or be naturally durable wood, or be of a species of wood having a natural resistance to decay. Naturally durable wood by definition is the heartwood of decay-resistant redwood, cedars, black locust and black walnut.

Item 1: Crawl spaces and unexcavated areas under a building usually contain moisture-laden air. These spaces must be ventilated in accordance with Section R408 to remove as much moisture as possible before it causes decay. Wood placed a minimum specified distance above grade in unexcavated under-floor areas or crawl spaces, as shown in Commentary Figure R317.1(1), need not be either preservative-treated wood or wood that is naturally decay-resistant durable wood. These clearances below floor joists and beams are deemed to be the minimum necessary to allow adequate circulation and removal of moisture from the air and from the wood framing members. Such clearances apply within the exterior wall line of the building foundation.

Item 2: Foundation walls will absorb moisture from the ground and by capillary action move it to framing members that are in contact with the foundation. Unless a minimum clearance of 8 inches (203 mm) is maintained from the finished grade to wood sills resting on concrete or masonry exterior foundation walls, decay-resistant or preservative-treated wood, as





STYROFOAMIM SILL SEAL Foam Gasket (U.S. Only)

STYROFOAM™ SILL SEAL Foam Gasket is a flexible polyethylene foam gasketing strip that can help reduce air infiltration between a concrete foundation and sill plate, around windows and doors – and even between floors. The closed-cell polyethylene foam compresses to seal gaps in irregular surfaces, helping reduce air infiltration for a tighter building envelope and enhanced energy savings. It provides excellent and enduring resistance to water and water vapor.

STYROFOAMTM SILL SEAL Foam Gasket is part of the complete <u>A LA ALIA Member Barrier Solutions</u> lineup from Dow – products designed to enhance the performance of the building envelope.

STYROFOAMTM Sill Seal Foam Gasket also helps reduce air infiltration in commercial applications, including the THERMANIS Wall System.

Related Information

WE STHERMATE Weather Barrier Solutions - A Comprehensive System Designed for Complete Comfort (2MB PDF)

Complete Comfort (Canada) (2MB PDF)

Thickness x Width	Roll Length
.25" x 3.5"	50'
.25" x 5.5"	50'

We're here to help. If you're not finding the information you need, please let us know.

DO NOT REMOVE FROM JOB SITE

BLD2018-02390

Owner Name: LE	ONARD MERRELL JI	₹.		Phone	:
Address of Inspection	n: 6 BOWLING GRE	EEN LN			
Contractor: US	DOMEBUILDERS LL	C DBA USD BUIL	LDERS	Phone	: 713-1120
Directions:					
91 E TO BOWLING	GREEN WAY IN AF	RDEN - RT ON BO	WLING GREEN - I	OT ON LT	
			,		
Date Inspected: 12	2/04/2018	Inspector:	HM 5	HARLEY S	STEWART
Date Inspected: 12	2/04/2018	Inspector:	AM S	HARLEY S	STEWART
	2/04/2018 BUILDING SLAB	Inspector:	HM 5	HARLEY S	STEWART
Inspection Type:	BUILDING SLAB	Inspector:	· · · · · · · · · · · · · · · · · · ·		STEWART
Date Inspected: 12 Inspection Type: Inspection Results: Comments:	BUILDING SLAB	Inspector:	· · · · · · · · · · · · · · · · · · ·	HARLEY S	