### 1317 Broadway Street Ann Arbor HDC Review

October 13, 2022 – Guy Larcom Bldg 2<sup>nd</sup> Floor

Motion for the owner to proceed with a "non tearoff and restore" continuation of the sideing project started.

## Submitted by Brent Robertson 10/13/22

-Introduction-

-Past HDC Variance Allowance for Same Siding situation.-

- -1317 Broadway R-Value drops dramatically w/o moving forward Synthetic material use in historical restorations-
- -Broadway + Jones + Laird current homes using updated synthectic/modern siding materials today-
- -Owner owned the house 34+ years prior to the A2 HDC involvement in the area and would like to request as a one-time special grandfather benefit in their behalf-
- -RD KLINESCHIMDT Contracting the contractor doing this install is a reliable, well respected and quality siding contractor of Ann Arbor-
  - -Before and After Visual Mock up of the 1317 Broadway Siding Project-

-Conclusion-

#### Introduction

As the current property owner at 1317 Broadway for over 34 years I would like to work to mitigate HDC concerns and continue and improve the exterior asthetic value at 1317 Broadway. Economically speaking, the work was started and I would like to see it through with your blessings.

<u>The current siding flaw:</u> The current siding is cellulose, out dated asphalt brick impressed on upon the siding. That siding is out dated and cannot be returned it's 60 year old original form. There are many squirell hole patches and blown-in insulation holes and needs a new covering that is well dated. It needs a facelift.

By allowing this siding project to go forward, the HDC "will improve on Ann Arbor's home heating, r-value and thus, carbon footprint", by using a restoration quality, synthetic covering on siding project.

In the past, the HDC has granted a working variance on the exact same situation on 723 Moore Street (see below). That home also had the same brick on cellulose old siding that needed repair. We'd like to move in that same direction on the 1317 Broadway house as well based project economics and preserving it's architectural significance of the existing historical neighborhood. (see Items 1 - 7 below).

## 1. PAST HDC VARIANCE (Same situation) 723 Moore Street Case A2 HDC inside the Broadway Historic District allows vinyl siding:

\_\_\_\_\_\_

To:Robert Reilly

For: Waite-Kellogg House,

1838/1865 - 723 Moore Street Enlarged by clairvoyant physician Daniel B. Kellogg in the 1860s, this was once a very elegant Italianate home as shown in the engraving in the 1874 Atlas of Washtenaw County. By the turn of the century, however, it was a rooming house which it remains today. The current owner and occupant is gradually restoring the house himself to some of its former elegance but in such a way that will not force him to raise the rents beyond the tenants' ability to pay. Though artificial siding is usually discouraged for landmark buildings, the Commission granted Mr. Reilly's request to use vinyl siding based on the project's economics and the fact that the building was designated more for its history than its architectural significance.

\_\_\_\_\_

2. The entire house Thermal R-Value decreases DRAMATICALLY without this HDC MOTION OF WORK going forward.

At the same time, the carbon foot print of the home WILL ONLY increase and incur higher long term heating costs if this proposal is rejected.

I appeal to all of you please let the motion go forward.

<u>R-Value Definition:</u> a measure of the resistance of an insulating or building material to heat flow, expressed as R-11, R-20, and so on; the higher the number, the greater the resistance to heat flow. Example given: "The higher the number, the better the home holds heat inside, and not flowing out."

Motion for owner's proposal: Keeping and Using the existing  $\frac{1}{2}$  cellulose covering: R-Value TOTAL will be = 5.86.

1317 Broadway R-Value Exterior Layers and (rating) Calculation: Wood beveled Lap = (.80) + 1/2" Current Asphalt on cellulose = (.61) with Insulating board (1.80) + Has Fiber board with 1/2" Air Space (2.04) + Tyvek Moister Barrier (N/A)+synthetic siding (.61) - last layer. (see the Building Material R-value Chart next page).

**Motion for the HDC's Proposal:** <u>Tearing OFF the existing and RESTORING</u> the unknown condition of the lapboards beneath this old siding. Doing this, per the HDC's recommendations, "will only dramatically reduce the R-value of this home". Permanently and without improvement.

<u>The reason:</u> The ONLY outside exterior barrier will be "the newly restored Wood Bevel Lapped" siding = (.80) R Value.

"All other protective barriers and layers per HDC must be removed." - That is a very poorly insulated home and will be for a long time with out your support for this motion.

**MOTION FOR OWNER: <u>NOT TEARING OFF SIDING</u> = R VALUE = 5.86** 

MOTION FOR HDC'S RECOMMEND: TEARING OFF = R VALUE = .80

NOT TEARING OFF SIDING - YEILDS OVER .80/5.86 = 136 % IMPROVEMENT IN THE HOUSE THERMAL R-VALUE RATE.

## R-Value of Building Materials

Material	R/ Inch	R/ Thick- ness
Insulation Materials		
Fiberglass Batt	3.14	
Fiberglass Blown (attic)	2.20	
Fiberglass Blown (wall)	3.20	
Rock Wool Batt	3.14	
Rock Wool Blown (attic)	3.10	
Rock Wool Blown (wall)	3.03	
Cellulose Blown (attic)	3.13	
Cellulose Blown (wall)	3.70	
Vermiculite	2.13	
Air-entrained Concrete	3.90	
Urea terpolymer foam	4.48	
Rigid fiberglass (> 4 lb/ft³)	4.00	
Expanded Polystyrene (bead- board)	4.00	
Extruded Polystyrene	5.00	
Polyurethane (foamed-in-place)	6.25	
Polyisocyanurate (foil-faced)	7.20	
Construction Materials		
Concrete Block 4 inch		0.80
Concrete Block 8 inch		I.II
Concrete Block 12 inch		1.28
Brick 4 inch common		0.80
Brick 4 inch face		0.44
Poured Concrete	0.08	
Soft Wood Lumber	1.25	
2 inch nominal (1 ½ inch)		1.88
2 x 4 (3 ½ inch)		4.38

Material	R/ Inch	R/ Thick- ness
Fiberglass (¾ inch)		3.00
(r inch)		4.00
(1 ½ inch)		6.00
Extruded Polystyrene (3/4 inch)		3.75
(r inch)		5.00
(1 ½ inch)		7.50
Foil-faced Polyisocyanurate (3/4 inch)		5.40
(1 inch)		7.20
(1 ½ inch)		10.80
Siding Materials		
Hardboard (1/2 inch)		0.34
Plywood (5/8 inch)		0.77
(3/4 inch)		0.93
Wood Bevel Lapped		0.80
Aluminum, Steel, Vinyl (hollow backed)		0.61
(w/½ inch Insulating board)		1.80
Brick 4 inch		0.44

Interior Finish Materials		
Gypsum Board (drywall ½ inch)		0.45
(5/8 inch)		0.56
Paneling (3/8 inch)		0.47
Flooring Materials		
Plywood	1.25	
(3/4 inch)	020	0.93
Particle Board (underlayment)	1.31	
(5/8 inch)		0.82
Hardwood Flooring	0.91	

3. Synthectic Materials are a great weather and thermal option to use for the homeowner. Has excllent moister barrier TVEK along with a waterproof siding that is both durable and attractive for Victorian and replicating and perserving the old look of lapboard sided homes.

https://www.brickface.com/brickface/understanding-the-r-value-of-siding/

#### **Synthetic Siding**

Exterior insulated synthetic siding covers these studs and other spaces, which helps stop thermal bridging and reduces energy loss. Good quality insulated synthetic siding typically has an R-value of 2.0 - 4.0, depending on the brand, type, and size of siding you choose.

Regular synthetic siding R-value is usually about 0.61. Whether it's insulated or not, quality synthetic siding has a higher R-value than many other building materials. The R-values for other types of building materials include:

- Fiber cement 0.37
- Stucco 0.40
- Brick veneer –0.44
- Stone veneer 0.11

Talking to an <u>experienced contractor</u> about your needs and the aesthetic you want to achieve can help you better understand siding R-value and determine which material may be right for you.

### Other Benefits Of synthetic Siding

In addition to having a higher R-value, which can help increase the energy efficiency of your home, both regular and insulated synthetic siding offer benefits such as:

**Low maintenance** – synthetic siding does not need to be painted, caulked, or stained and is easy to clean with mild soap and a garden hose.

**Durability** – Quality synthetic siding is effective at withstanding the elements, from UV rays to heavy winds to snowstorms. It is also resistant to pests and moisture, which helps prevent rot.

**Versatility** –synthetic siding comes in just about every color, texture, and style you can imagine, including siding that looks like natural wood or stone.

**Curb appeal** –Although siding R-value and energy efficiency are important, first impressions are also critical. Whether you want your home to stand out from the crowd or you're putting it up for sale, installing synthetic siding adds curb appeal and can increase the value of your home.

# 4. Broadway + Jones + Laird current homes using updated synthectic/modern siding materials today.

Of approximately 102 separate properties on Broadway street/Laird/Cedar Bend – 23 residential properties in the area are already using the benefits of this siding option.

# 23% of the homes in this area of the Broadway District are already using updated siding materials.































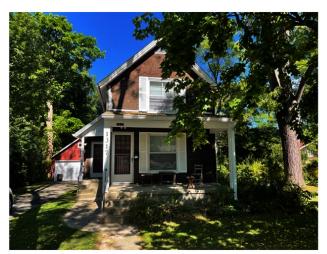








- 5. Owner owned the house 34+ years and prior to the A2 HDC involvement in the area and would like to request as a one-time grandfather benefit in their behalf.
  - The 3-4 story Beekman Place at the bottom of Broadway, The Condominum Complex at the bottom of Broadway, and other new construction on Broadway are both enjoying the Broadway HDC district using new materials benefits, we only would want the same, improving both R-values, carbon footprints, and the entire street appearance, which is the only intent in this request for a non-tearoff siding replacement variance request.
- 6. RD KLINESCHIMDT Contracting the contractor doing this install is a reliable, well respected and quality siding contractor of Ann Arbor. The quality of the matierals used and the job to be completed will be in the highest quality. We're not asking for muesem type restoration only a long lasting QUALITY job that is feasible in both, increasing the carbon rating and economic cost of the owner.
- 7. Before and After Visual Mock up of the 1317 Broadway Siding Project:



**BEFORE (LOOKS TODAY)** 



**AFTER (MOCK UP)** 

#### Conclusion

In conclusion, other homes have had synthectic siding applied during the HDC's past reviews and done so that is both in good historical architectural taste perserving and improving the tre-value and carbon foot print of the entire house (by using their existing covering, not going to bare lap board wood, and not tearing off a insulation cover).

Going with the HDC recommendation of removal of the top covering exterior layers - will reduce the entire R-VALUE by decreasing the value by at least a 5 point R-VALUE rating along with increasing the carbon foot print of the home correspondingly.

Going with the owner's alternative, going with this request for a variance, <u>keeping with siding covering</u> (non tearoff) the house the way it is increases the R-VALUE rating 136%, and decreases the carbon foot print of the home.

• Chris from RD Klineshcimdt also agrees and will atest that removal of the exterior covering will only DECREASE the r-value and INCREASE the carbon foot print (see R-VALUES above). The house currently has a great cover of exterior insulation. It would be unwise to tear that off.

I have owned the property for over 34+ years the house is in need of this repair. I would like the HDC committee to understand that economics of the scope of the project. A muesem quality restoration is just not financially possible for me. Doing that will ONLY INCREASE the costs of heating the house, <u>ripping off that important exterior</u> cover it's not just "a negligable" r-value, we're looking at here It's dramatic.

Please move forward with the motion to approve.

Thank you for your time, the opportunity to reside in our great state and city, and for your thoughtful consideration in passing this motion.

Kind regards,

Brent Robertson Owner 1317 Broadway Street