FREQUENTLY ASKED QUESTIONS CATEGORIES
- Introductory Information for Tyvek® ThermaWrap™ R5.0
- Product Knowledge
- Installation Details
- Cladding Details
- DuPont™ Insulated Battens and Insulated Battens CT
- Economics, Codes, and Energy Savings

INTRODUCTORY INFORMATION FOR TYVEK® THERMAWRAP™ R5.0

Why should I use Tyvek® ThermaWrap™ R5.0?
Tyvek® ThermaWrap™ R5.0 offers the breathability and water management benefits of DuPont™ Tyvek® plus an additional 1 ½" insulated batting that delivers an R-value of 5.0. It is the only continuous exterior insulation and weather resistant barrier (WRB) solution that is breathable and, as a result, will help reduce water accumulation in the wall that can lead to mold and water damage. In addition, it installs in a familiar and similar way as Tyvek® HomeWrap®.

How easy is Tyvek® ThermaWrap™ R5.0 to install?
Tyvek® ThermaWrap™ R5.0 is installed in a similar fashion to Tyvek® HomeWrap® using familiar installation practices. One key difference in the installation process is that surfaces must be bumped-out 1 ½" in order to accommodate for the thickness of Tyvek® ThermaWrap™ R5.0. Tyvek® ThermaWrap™ R5.0 is only fastened along the top edge of the product. All other seams are taped. Refer to the Tyvek® ThermaWrap™ R5.0 Installation Guidelines for more details.

How long does Tyvek® ThermaWrap™ R5.0 take to install?
An installation time study was completed by Home Innovation Research Labs™ to compare the time to install the following:
- Tyvek® ThermaWrap™ R5.0
- Rigid foam exterior insulation with taped seams
- Rigid foam insulation with house wrap installed over the foam

The study showed that Tyvek® ThermaWrap™ R5.0 installs approximately 7% faster than rigid foam alone and 20% faster than rigid foam and a house wrap. (See chart below)

<table>
<thead>
<tr>
<th></th>
<th>Tyvek® ThermaWrap™ R5.0</th>
<th>Foam with Taped Seams</th>
<th>Foam with Tyvek® HomeWrap®</th>
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<tbody>
<tr>
<td>Lumber Build-Outs</td>
<td>113</td>
<td>59</td>
<td>49</td>
</tr>
<tr>
<td>XPS Foam Board</td>
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<tr>
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<td>Tyvek® HomeWrap®</td>
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<td>N/A</td>
<td>259</td>
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<tr>
<td>Tyvek® ThermaWrap® R5.0</td>
<td>414</td>
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<td>N/A</td>
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<tr>
<td>Total Productive Time (Minutes)</td>
<td>527</td>
<td>567</td>
<td>665</td>
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How is Tyvek® ThermaWrap™ R5.0 different from Tyvek® ThermaWrap™ LE?
Tyvek® ThermaWrap® LE (formerly known as Tyvek® ThermaWrap®) is a low emissivity, metalized, reflective product. Tyvek® ThermaWrap® R5.0 is an insulating house wrap which consists of a Tyvek® HomeWrap® top sheet adhered to a 1.5” thick fiber insulation blanket. Note: The top sheet of Tyvek® ThermaWrap® R5.0 is not metallized.

What is Tyvek® ThermaWrap™ R5.0 made of?
The top sheet is Tyvek® HomeWrap®, and the insulation blanket is comprised of a proprietary blend of polyester fibers and a minimum of 20% pre-consumer recycled polyolefin.

Does the product cause itching like other types of insulation?
No, it does not. The top sheet is Tyvek® HomeWrap® and the insulation blanket is comprised of polyester and polyolefin fibers, similar to insulation found in winter coats.

Is Tyvek® ThermaWrap™ R5.0 made in America?
Yes, all elements of Tyvek® ThermaWrap® R5.0 are made in the United States.

Can I use Tyvek® ThermaWrap® R5.0 when residing a building?
Yes. Tyvek® ThermaWrap® R5.0 Installation Guidelines for Residing are published on the DuPont website.

What types of buildings can I use Tyvek® ThermaWrap™ R5.0 on and can it be used in multi-family or commercial construction?
Tyvek® ThermaWrap® R5.0 can be used on residential single-family homes and in multifamily and commercial applications. It is designed to be used on wood-framed structures that are built in a similar fashion to single family wood-framed homes. Specific requirements for multifamily and specific commercial construction are: must be Type V construction with 3 stories or less, must not require ASTM E2357 performance or NFPA 285, and must follow current published installation and cladding details in the appropriate Tyvek® ThermaWrap® R5.0 Installation Guidelines. Contact your local Tyvek® Specialist for more details.

Can I use DuPont™ Flashing Systems products with Tyvek® ThermaWrap™ R5.0?
Yes, all DuPont self-adhered flashing products and Tyvek® seam tape can be used in a familiar and similar fashion as with any Tyvek® Weather Resistive Barriers.

Is Tyvek® ThermaWrap™ R5.0 covered by a warranty?
Yes, DuPont offers a 10-year limited product warranty for Tyvek® ThermaWrap® R5.0 and is similar to the warranty for Tyvek® HomeWrap®. For details, visit our website.

Is there a DuPont™ Certified Installer training program for Tyvek® ThermaWrap™ R5.0?
DuPont has developed a Certified Installer training program for Tyvek® ThermaWrap® R5.0 that is similar to the Tyvek® HomeWrap® Certified Installer training. Certification for Tyvek® HomeWrap® is a prerequisite to certification to Tyvek® ThermaWrap® R5.0. Contact your local DuPont™ Tyvek® Specialist for more details.

What are the benefits of using Tyvek® ThermaWrap™ R5.0 versus rigid foam?
Tyvek® ThermaWrap® R5.0 is the better continuous exterior insulation choice for a number of reasons, including:

1. It will allow the wall to dry to the outside in case of a wetting event, rather than trapping moisture like rigid foam insulation.
2. It allows for better water and air management details.
3. It is an integrated WRB and continuous exterior insulation on one roll.
4. It is a Class A material without the addition of any fire retardant chemicals.
5. It is supported by the DuPont™ Tyvek® Specialist Network and the DuPont™ Building Knowledge Center.

For more information on the vulnerabilities of rigid foam insulation, see the following DuPont Tech Talk, “Weather Barriers are a Must with Exterior Foam Sheathing”.

Where can I buy Tyvek® ThermaWrap™ R5.0?
Tyvek® ThermaWrap® R5.0 can be purchased through the same supplier channels as Tyvek® HomeWrap®. Contact your local DuPont™ Tyvek® Specialist or visit www.thermawrapR5.tyvek.com for more information.

Can I have samples of Tyvek® ThermaWrap™ R5.0 and of the DuPont™ Insulated Battens?
Yes. Samples can be requested by calling 1-800-44-TYVEK or by contacting your local DuPont™ Tyvek® Specialist.

Can I use Tyvek® ThermaWrap™ R5.0 in any other applications?
DuPont does not support or warranty Tyvek® ThermaWrap® R5.0 in any application other than as described in Installation Guidelines.

Can I get my company’s logo printed on Tyvek® ThermaWrap™ R5.0?
No, not at this time.
Who do I contact with questions?
Contact your local DuPont™ Tyvek® Specialist or call 1-800-44-TYVEK for additional information. To find the DuPont™ Tyvek® specialist in your area go to www.weatherization.tyvek.com

PRODUCT KNOWLEDGE AND PROPERTIES
Is there any special Personal Protective Apparel (PPE) needed to handle or install Tyvek® ThermaWrap® R5.0?
No, but DuPont recommends the use of gloves, safety glasses, safety shoes, and hard hats on any construction site. You should be sure to comply with OSHA requirements.

What are the dimensions of the product?
The Tyvek® ThermaWrap® R5.0 roll is 1 1/2” thick, 4’ tall and 40’ long. These dimensions do not include the 6” un-insulated flap at the start and bottom of each roll.

Once installed, how long can I leave Tyvek® ThermaWrap™ R5.0 exposed?
Product should be covered within 120-days of installation, the same as Tyvek® HomeWrap®.

Are there any acoustical benefits of Tyvek® ThermaWrap® R5.0?
Yes, homeowners have experienced noise reduction in their home after Tyvek® ThermaWrap® R5.0. Tyvek® ThermaWrap® R5.0 has sound absorption benefits and a Sound Transmission Class (STC) rating of 32, an Outdoor-Indoor Transmission Class (OITC) rating of 25, a Noise Reduction Coefficient (NRC) rating of 0.70, and a Sound Absorption Average (SAA) of 0.73 (based on ASTM E90 Sound Transmission Loss testing and ASTM C423 Sound Absorption Testing).

For reference, the Sound Transmission Class (STC) is a number rating of a material's ability to retard airborne sound. A typical interior wall with 2x4 studs, 16” on center, and drywall installed on each side has a STC of between 30 and 35.

Are there any flammability concerns with Tyvek® ThermaWrap® R5.0?
Tyvek® ThermaWrap® R5.0 is combustible. Tyvek® ThermaWrap® R5.0 is a Class A building material with a Flame Spread Index ≤ 25 and Smoke-Developed Index ≤ 450 (based upon ASTM E-84 Surface Burning Characteristics). Unlike some rigid foam products, Tyvek® ThermaWrap® R5.0 achieves this performance without added fire retardant chemicals.

What air and water performance levels are Tyvek® ThermaWrap™ R5.0 designed to meet?
The current Tyvek® ThermaWrap® R5.0 Installation Guidelines are designed to meet performance requirements up to ASTM E1677 – 65 mph equivalent structural load and 15 mph equivalent wind-driven rain without water infiltration. This is consistent with Tyvek® HomeWrap® performance levels.

Is Tyvek® ThermaWrap™ R5.0 job site waste recyclable?
Yes. Tyvek® ThermaWrap® R5.0 is classified as Plastic Recycling Symbol 7 - miscellaneous. Examples of other materials that are Plastic Code 7 are DVDs, sunglasses, iPod cases, baking bags and ketchup bottles. Check with your local recycler for more information.

How long does Tyvek® ThermaWrap® R5.0 take to recover its thickness once unrolled?
The product is compressed during shipment, but will return to its original thickness within 15 minutes.

Does Tyvek® ThermaWrap® R5.0 lose R-value when it is compressed?
Yes, like all compressible insulation materials, Tyvek® ThermaWrap® R5.0 loses R-value as it is compressed. When compressed completely to 0.25”, its R-value is approximately 1.5. Care must be taken during installation to mitigate compression. Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details.

Can Tyvek® ThermaWrap™ R5.0 get muddy or dirty?
DuPont recommends that the insulation blanket be kept clear of mud, dirt, and job site debris.

Will insects or rodents nest in and/or damage the insulation blanket?
As is the case with any exterior insulation, proper installation will prevent infiltration/nesting of insects and rodents and reduce the chances of damage and loss of R value. Care must be taken during installation to mitigate this risk. Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details.

TYVEK® THERMAWRAP™ R5.0 PACKAGING AND STORAGE
How is Tyvek® ThermaWrap™ R5.0 packaged?
Individual rolls of Tyvek® ThermaWrap® R5.0 are packaged in double plastic bags and come in a palletized carton containing 9 rolls.

Can I stack cartons of Tyvek® ThermaWrap™ R5.0?
Yes, the palletized cartons of Tyvek® ThermaWrap® R5.0 can be stacked up to three high on a flat surface.

Can I store the product outside?
DuPont does not recommend the long-term storage of the product outside.
INSTALLATION DETAILS

Note: Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details.

Will installers need to pad or bump out windows and doors when installing Tyvek® ThermaWrap® R5.0?
Yes. Bump out frames are installed around all windows and doors so that the window or door is on the same plane as the Tyvek® ThermaWrap® R5.0. For lap sidings, bump out frames are also installed around inside and outside corners to accommodate the trim and siding. Either the DuPont™ Insulated Batten CT or nominal 2” thick dimensional lumber can be used for the bump out frames.

Note: the DuPont™ Insulated Batten CT is explained later in this document.

How do I install windows and doors with Tyvek® ThermaWrap™ R5.0?
Windows and doors are installed and integrated with Tyvek® ThermaWrap® R5.0 in a similar way to Tyvek® HomeWrap®. The window and door flashing is integrated with the top sheet of Tyvek® ThermaWrap® R5.0 to ensure WRB continuity. Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details.

What are the recommended tools for cutting Tyvek® ThermaWrap™ R5.0?
DuPont has identified three tools that are very effective in cutting Tyvek® ThermaWrap® R5.0:
1. Wiss® Full Metal Body Shears
2. OLFA® 60mm Deluxe rotary cutter
3. A utility knife for cuts less than 6”

Other recommended cutting tools include:
4. A standard carpet knife
5. FISKARS® 60mm Titanium Rotary Cutter

Where can I purchase these cutting tools?
A variety of standard utility and carpet knives and the Wiss® Full Metal Body Scissor are available at building material retail stores. The FISKARS® 60mm Titanium and the OLFA® 60mm Deluxe Rotary Cutter can be found at many fabric and craft stores – more information is available at www.fiskars.com or www.olfa.com. Kai 7280 11” Professional Shears can be found on-line – more information is available at www.kaiscissors.com or by calling 1-800-481-4943.

How do I terminate Tyvek® ThermaWrap® R5.0 at the bottom of the wall or at roof-wall interfaces?
The uninsulated Tyvek® HomeWrap® flap is sealed to the bump out frame at the bottom of the wall and roof-wall interfaces.
What else should I take into consideration when installing Tyvek® ThermaWrap® R5.0?
Because you are adding thickness to the wall, before you begin construction, consider what changes you need to your foundation, brick ledge, soffit/fascia, window/door jamb extensions, and gable/eave extensions. If a wide trim is used, ensure that there will be adequate nailing base for both the trim, shutters and the siding around windows/doors and in inside/outside corners.

CLADDING DETAILS
Note: Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details.

What claddings can be installed over Tyvek® ThermaWrap® R5.0?
Tyvek® ThermaWrap® R5.0 can be installed behind vinyl, brick, natural stone, wood lap siding, and fiber cement claddings. For wood lap siding and fiber cement, the installation of the DuPont™ Insulated Batten is required. At this time DuPont does not have installation instructions and has not conducted testing for installing cedar shakes/shingles, EIFS, stucco, and manufactured stone veneer over Tyvek® ThermaWrap® R5.0. We continue to test and review additional cladding types.

How do I install vinyl siding over ThermaWrap™ R5.0?
Tyvek® ThermaWrap® R5.0 must not be compressed during the installation of vinyl siding. Fasteners must be 1 ½” longer to compensate for the thickness of the Tyvek® ThermaWrap® R5.0 and to meet the required penetration into the structural member. The DuPont™ Vinylign™ tool has been designed to assist with installation of vinyl siding to ensure that each nail is driven to a consistent depth.

If my vinyl siding is installed over Tyvek® ThermaWrap™ R5.0 and is fastened 1 ½” away from the wall, will my siding be more likely to blow off?
No. The Vinyl Siding Technical Bulletin, (K-27324), details the performance characteristics of installed vinyl siding over Tyvek® ThermaWrap® R5.0. The wind load resistance and impact resistance of vinyl siding are not reduced and the potential for surface distortion is not increased when vinyl siding is installed over Tyvek® ThermaWrap® R5.0. Refer to the Vinyl Siding Technical Bulletin, for more details.

What happens if something impacts my vinyl siding installed over Tyvek® ThermaWrap™ R5.0?
The Vinyl Siding Technical Bulletin, (K-27324) shows the properties of vinyl siding when installed over Tyvek® ThermaWrap® R5.0. The document shows that impact resistance and wind load resistance of vinyl siding are not reduced and the potential for surface distortion of vinyl siding is not increased when vinyl siding is installed over Tyvek® ThermaWrap® R5.0. Refer to the Vinyl Siding Technical Bulletin for more details.

What do I need to consider when installing brick and natural stone over Tyvek® ThermaWrap® R5.0?
Because you are adding thickness to the wall assembly, before you begin construction consider any changes you may need to your foundation or brick ledge. Brick should be installed with the standard air space distance measured from the surface of Tyvek® ThermaWrap® R5.0. Standard corrugated brick ties can be used for fastening and installed directly over Tyvek® ThermaWrap® R5.0. Although Tyvek® ThermaWrap® R5.0 will be compressed where brick ties are attached, the overall effective R-value of the wall will still be at least 5.0.

Will Tyvek® ThermaWrap™ R5.0 blow off the wall if I don’t put my cladding over it right away?
When installed properly using recommended fasteners, fastening pattern and tape, the product should not blow off the wall under normal weather conditions. If rough window and door openings are wrapped over with Tyvek® ThermaWrap® R5.0 during the installation process, ensure the window opening is prepared by making the appropriate cuts and securing the flaps. Do not leave the job site with window and door openings wrapped over.

Won’t Tyvek® ThermaWrap™ R5.0 compress when I install cladding over it, resulting in a loss of R-value?
When installed according to the installation instructions, there is a minimum amount of compression, however, the effective R-value of the wall is still at least 5.0. Vinyl is installed using longer fasteners so that it can be hung and not compress the Tyvek® ThermaWrap® R5.0. For brick and natural stone, brick ties are fastened directly over Tyvek® ThermaWrap® R5.0 – although compressed where attached, the overall effective R-value of the wall will still be at least 5.0. For fiber cement and wood lap siding, the use of the DuPont™ Insulated Batten will insure that an R-value of 5.0 is attained.

DU Pont™ Insulated Battens and Insulated Battens CT
What is a DuPont™ Insulated Batten?
The DuPont™ Insulated Batten and DuPont™ Insulated Batten CT are accessory products that allows wood lap siding and fiber cement claddings to be installed over the Tyvek® ThermaWrap® R5.0 and maintain the R5.0 insulation value. The primary purpose of the product is to support the weight of these claddings while maintaining a consistent R5.0 continuous exterior insulation, offsetting any R-value loss as the insulation material is compressed under these specific cladding types. The DuPont™ Insulated Batten is a specially designed 4’ long furring strip composed of a ¾” plywood strip adhered to a foam backing.
**How is the DuPont™ Insulated Batten used and installed?**

DuPont™ Insulated Battens are installed over the sheathing and into each stud framing member, either 16" or 24" on center. Tyvek® ThermaWrap® R5.0 is then installed and fastened into each Insulated Batten.

**How many DuPont™ Insulated Battens are needed on a typical house?**

The number of DuPont™ Insulated Battens needed for a house will vary by house size and house complexity. DuPont™ Insulated Battens are fastened along the stud lines of the home. An estimate of the number of battens needed for a home can be calculated by determining the approximate number of studs in the home and then calculating the total linear length of all of the studs.

**What is the difference between DuPont™ Insulated Batten and DuPont™ Insulated Batten CT?**

The DuPont™ Insulated Batten CT is an accessory item designed to be used as a nail base at all inside and outside corners, around windows and doors, penetrations, wall-to-roof intersections, and at areas on the structure where cladding accessories such as shutters and decorative trim are installed. “CT” in the name stands for “Corners and Trim.” Each Insulated Batten CT is 4’ long and is composed of a ¾” plywood strip adhered to a foam backing. Refer to the Tyvek® ThermaWrap® R5.0 Installation Guidelines for more details on the installation of the DuPont™ Insulated Batten CT.

Note: DuPont™ Insulated Batten CTs are only available in the United States.

**How do I fasten the DuPont™ Insulated Batten and the Insulated Batten CT to the wall?**

Both the Insulated Batten and the Insulated Batten CT should be fastened using minimum 3” 10d common framing nails.

**How are the DuPont™ Insulated Battens packaged?**

DuPont™ Insulated Battens are packaged in boxes which are then placed on a pallet. 24 Insulated Battens come in a box.

**How are the DuPont™ Insulated Batten CT packaged?**

DuPont™ Insulated Batten CT are packaged in boxes which are then placed on a pallet. 11 Insulated Battens CT come in a box.

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**ECONOMICS, CODES, AND ENERGY SAVINGS**

**ECONOMICS**

**How much does Tyvek® ThermaWrap® R5.0 cost?**

DuPont has announced a suggested retail price of $133 per roll of Tyvek® ThermaWrap® R5.0, not including freight charges. Consult your local building materials dealer for pricing. Final pricing is determined by our Distributors and Dealers.

**How much does Tyvek® ThermaWrap® R5.0 cost to install?**

Installation costs will vary across the country. Consult your local contractor for pricing. Refer to the Time Study Installation Time Study chart on page 1.

**How much does Tyvek® ThermaWrap® R5.0 cost relative to other continuous exterior insulation materials?**

The total installed cost of Tyvek® ThermaWrap® R5.0 (material and labor) is approximately 10% higher than the total installed cost of a premium house wrap and 1” extruded polystyrene rigid foam board insulation (materials and labor). However, Tyvek® ThermaWrap® R5.0 delivers a higher return on investment for the premium. Tyvek® ThermaWrap® R5.0 offers builders a breathable continuous exterior insulation choice that can help reduce the risk of mold and water damage. Pricing will vary across the country. Consult your local building materials dealer for pricing.

**Is Tyvek® ThermaWrap® R5.0 part of Contractor Rewards?**

Yes. Each roll is worth 130 points.

**CODES**

**Has a code evaluation report been issued for Tyvek® ThermaWrap® R5.0?**

Yes. The code evaluation report for Tyvek® ThermaWrap® R5.0 is ESR-3545. The evaluation report number is also printed on the product.

**Does Tyvek® ThermaWrap® R5.0 product meet the continuous exterior insulation requirements?**

Yes, Tyvek® ThermaWrap® R5.0 meets the IBC, IRC and IECC requirements for exterior insulation. Tyvek® ThermaWrap® R5.0 can be used to help you meet or exceed building codes and/or standards for continuous exterior insulation. For more information consult our Dealer Fact Sheet, (K-27287).

**Is exterior insulation a building code requirement?**

Building codes are changing. Per the 2012 and 2015 IECC, exterior insulation is required for new construction in Climate Zones 6 through 8. In Climate Zones 3 through 5, the 2012 and 2015 IECC can be met by building either 2x6 walls with R20 cavity insulation or by adding R5.0 exterior insulation to 2x4 framed walls with R13 cavity insulation. Local code requirements vary and depend on the local code adoption and enforcement. Refer to your local building codes and contact your local DuPont™ Tyvek® Specialist for more details.
**ENERGY SAVINGS**

How does Tyvek® ThermaWrap™ R5.0 contribute to energy savings?

Installing Tyvek® ThermaWrap™ R5.0 can have a significant impact on energy savings. Additionally, installing Tyvek® ThermaWrap™ R5.0 can significantly reduce HERS Index ratings. For more information see the Tyvek® ThermaWrap™ R5.0 Energy Savings Tech Talk (K-27345).

Does Tyvek® ThermaWrap™ R5.0 contribute toward LEED credits?

Tyvek® ThermaWrap™ R5.0 can contribute toward LEED in similar ways to other DuPont™ Weatherization Systems products. DuPont™ Tyvek® Weatherization Systems can contribute toward LEED® credits in the following categories: Energy & Atmosphere (EA), Environmental Quality (IEQ), and Innovation in Design (ID). DuPont™ Tyvek® Weatherization Systems products help prevent moisture intrusion and help seal the building envelope, contributing to the overall building sustainability by helping to avoid premature degradation, increasing thermal comfort and indoor environmental quality, and reducing the HVAC energy use required for heating and cooling.

Will using Tyvek® ThermaWrap™ R5.0 help me receive energy or tax credits?

Tyvek® ThermaWrap™ R5.0 is an exterior insulation product that may qualify for energy or tax credits. These programs often vary municipality to municipality. Check with your local government or utility company for more information regarding energy and tax credits in your area.

For more information visit us at www.thermawrapr5.tyvek.com or call 1-800-44-Tyvek

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