

◀◀ Construction Specification ▶▶▶

Americold Benson
2458 Hodges Chapel Rd
Benson, NC 27504-6446

Specifications For CentiMark TPO Mechanically Fastened System


Sections included: Freezer 2, Freezer 3, Freezer 4, Loading Dock 2

Project Preparation:

The following scope of work for the Freezer Sections will be done so in accordance to Factory Mutual (FM) Assembly #392183-0-0


Perform a pre-job meeting to determine jobsite logistics and safety requirements.

Furnish and install temporary rooftop chute assembly for debris removal.


Furnish and install proper safety equipment in accordance with Centimark's written safety program. 

Safety Related

Furnish and install warning lines to identified areas associated with ground related roofing activities.

Store roofing materials in accordance with good roofing practices. Material placement will be to distribute weight loads throughout the entire roof area. 

Surface Preparation:

Remove and dispose of existing loose gravel/rock ballast by means of industrial roof vacuum or mechanical sweeper. (Freezer 2, Freezer 3, Freezer 4 Only.) 

Remove and dispose of existing roof down to structural deck. (Freezer 2, 3, 4 Only)

Remove and dispose of existing roof down to the primary roof system. (Loading Dock 2 Only)

Removal of existing roof will be limited to an amount that can be replaced the same day.

Inspect existing structural deck for deterioration.

Identify and remove structural deck not capable of providing an acceptable substrate for the installation of the new roof. Furnish and install new deck at a unit cost of \$7.75 per square foot. Areas of removal will be approved by an Owner's representative.

Remove existing counter-flashings and dispose of debris. (Loading Dock 2 Only.)

Remove existing perimeter metal edge and dispose of debris.

Remove existing gutter system and dispose of debris. (Loading Dock 2 Only.)

Remove the existing perimeter termination bar and dispose of debris. (Loading Dock 2 Only.)

Remove existing wall flashings to a workable surface and dispose of debris. (Freezer 2, Loading Dock 2 Only.)

Insulation Attachment:

Furnish and install two (2) layers of 4" polyisocyanurate insulation (R-Value = 23.6 per layer) with a total R-Value of 47.2. This layer of insulation will be mechanically attached to the prepared substrate utilizing FM Global (FM) approved 3" plates and fasteners. (Freezer 2, Freezer 3, Freezer 4 Only.)

Furnish and install one layer of .25" Seucrock Roof Board, over a prepared substrate utilizing FM Global (FM) approved 3" plates and fasteners. (Loading Dock 2 Only.)

System Application:

Furnish and install **CentiMark** 60 mil reinforced, TPO roof membrane.

Position the TPO membrane over the prepared substrate and allow the membrane sufficient time to "relax" prior to installation.

Install the new TPO membrane over the prepared surface by utilizing mechanical fasteners on 6 foot centers in the field, with a reduction of 3 foot centers in the perimeter and corners as directed by the Assembly.

Mechanical attachment of the membrane shall be done utilizing a 1" wide polymer batten bar or 2 3/8" round seam plates and FM Global (FM) approved fasteners. Maximum spacing 6" on center. 🗨️

The thermoplastic membrane seams will be overlapped a minimum of 5", then hot air welded together. Weld width shall be a minimum of 1.5" in width for automatic machine welding. Weld width shall be 2" in width for hand welding. Upon completion of welding, each seam shall be probed to ensure proper securement. 🗨️

HVAC, Curbed Penetrations and Other Air Handling Unit Details

Furnish and install at the base of the unit 2 3/8" round seam plates to the field membrane. Adhere a second piece of thermoplastic membrane to the curb with bonding adhesive and install prefabricated universal corners for reinforcement.

Parapet Wall Detail

(Freezer 2, Loading Dock 2 Only.)

Furnish and install 3" round plates at the base of the wall. The membrane will be adhered to the wall, welded to the base securement 3" plates and the existing coping re-installed. (Freezer 2, Loading Dock 2 Only.) 🗨️

Parapet Wall Detail

(Freezer 2, Loading Dock 2 Only.)

Furnish and install 2 3/8" round seam plates or 1" wide polymer batten strip to the field sheet at the base of the wall. A second piece of membrane will be adhered to the wall, welded to the field sheet and terminated with an aluminum bar. (Freezer 2, Loading Dock 2 Only.)

Pipes Less Than 6" In Diameter

Furnish and install new prefabricated thermoplastic pipe boot secured at the top with a stainless steel screw type clamp adhered to the field sheet. 🗨️

Stacks Greater Than 6" In Diameter

Furnish and install a 60 mil, non-reinforced thermoplastic flashing, where applicable.

Miscellaneous Projections

Furnish and install thermoplastic flashings to the roof projections. Upon completion of welding, each seam shall be probed to ensure proper securement. 🗨️ 🗨️

Transition at Gutter

(Loading Dock 2 Only.)

Weld the TPO membrane to the coated metal edge. Weld to be verified with probe upon completion. (Loading Dock 2 Only.)

Adhere the TPO membrane into the gutter with bonding adhesive. (Loading Dock 2 Only.)

CentiMark will furnish and install spray foam detail around the perimeter on all freezer sections along with butyl accessories to help create an appropriate cold storage detail. The foam will be at all roof-to-wall areas and the subsequent layers of insulation.

Sheet Metal Accessories:

Furnish and install new .040 aluminum pre-finished gutter and downspouts. Choice of color to be selected by owner from standard color chart. (Loading Dock 2 Only.)

Furnish and install new Factory Mutual approved perimeter edging with continuous cleat. This metal edge system can be installed with wind rating approvals in excess of 200 mph. The color choice to be selected by owner from standard color chart.

Furnish and install new 24 gauge white thermoplastic coated metal gravel stop/drip edge with continuous cleat at all draining edges

Standard Operating Procedures:

Employee Professionalism

All work shall be performed in a safe, professional manner in compliance with Centimark policy.

Asbestos Testing

Core samples of suspect existing roof systems will be taken to an independent laboratory for the testing of asbestos content (ACRM). **CentiMark** can provide removal of ACRM for an additional investment.

Permits

CentiMark will supply the necessary permits for the project.

If the permit is purchased separately from the roof contract, **CentiMark** can submit all required documentation to secure the permit on the owner's behalf.

Nightly Tie-In's

Depending on new roof system being installed, temporary water cut-offs are to be constructed at the end of each working day to protect the newly installed roof system and building interior.

Clean Up

All work premises will be cleaned daily during the construction process and at the completion of the project.

Job Acceptance and Punch List

Conduct a post job walk through for final sign-off of our job completion form.

Warranty

Upon purchase of the roofing system, you become entitled to receive the benefits of single source responsibility through **CentiMark's** comprehensive written warranty. This warranty protects your roof against defects in materials or workmanship. If your roof leaks at any time during the warranty period, we will provide complete warranty service.

Quote Name	Section Name	Length
Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21	Freezer 2	20
Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21	Freezer 3	20
Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21	Loading Dock 2	20
Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21	Freezer 4	2020

Exclusions

CentiMark Corporation disclaims any and all responsibility for pre-existing conditions including, but not limited to: structural damage or deficiencies, clogged drains, mold growth, excessive standing water, removal of hazardous material or other hidden deficiencies such as; damaged or leaking skylights, HVAC units/conduits, electrical or gas lines. This proposal does not cover, and in no case shall CentiMark be liable for, the removal of, or damage to, HVAC units/conduits, gas lines, water lines, electric lines, or conduits, whether located above, below, or in the roof system, lightning protection systems, landscaping, communication cable, communication devices, or other devices, including recalibration of satellites. It is the building owner's financial obligation to provide corrective measures.

Please know that CentiMark Corporation is not an architect, engineering or design professional, and consequently assumes no responsibility for any such services. The proposed scope of work has been submitted upon your specific request. Unless otherwise noted specifically in the proposed scope of work, you acknowledge that the following options are not included in the contract price, including: safety accessories; increased insulation; or enhanced roof draining upgrades such as added drains, emergency overflow scuppers, sloped/tapered insulation or larger gutters and downspouts. Please let us know if you would like to review or include any of these options.

◀◀◀ Executive Proposal Summary ▶▶▶

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2458 Hodges Chapel Rd
Benson, NC 27504-6446

Quote	Sq Ft.	Section	Warranty*	System	Price
Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21	95,784	See Investment Section List		TPO Fastened	\$1,083,937

* Roof system warranties protect your roof against defects in materials or workmanship for the specified period as outlined in the CentiMark Non-Prorated Limited Roof Warranty or the manufacturer's warranty.

Options for Quote: Nordic Benson - mf tpo (2,3,4, LD 2) - 03-22-21

- CentiMark to include the Freezer 1 section with the same scope of work as provided for other Freezer Sections for an additional investment of: \$467,344.00

- CentiMark to include the Grifols Low (loading dock) section utilizing the same scope of work found in Loading Dock #2 for an additional investment of: \$67,068.00

Comments:

The pricing shown above is broken out per section here: Freezer #2 = \$369,801.00 - Freezer #3 = \$374,046.00 - Freezer #4 = \$253,262.00 and LD#2 = \$86,828.00

Additional Comments:

The breakout pricing is based on the assumption that all sections to be completed within the same project/mobilization. Price per section subject to change based on the overall footprint change affecting the economy of scale.

For internal use only, ID # 314444
Version: 314444.1.15

CentiMark Project Manager Signature

Date

Standard terms: One-third (1/3) of the contract price due at the job start and the balance due net thirty (30) upon job completion, unless otherwise agreed to in the contract document. Projects greater than \$250,000 may be subject to progress payments. (Special terms are available upon request)

CentiMark Corporation reserves the right to adjust pricing based on industry wide price increases. Due to supply chain pressures and various material shortages, the roofing industry is currently experiencing unprecedented volatility. This is affecting both material costs and delivery schedules.

Based on the above, the pricing provided can only be held firm for 30 days after the proposal date.

If, during the performance of the contract, the price of material significantly increases, through no fault of CentiMark, the price shall be equitably adjusted by an amount reasonably necessary to cover any such significant price increases. As used herein, a significant price increase shall mean any increase in price exceeding 5 percent experienced by CentiMark from date of contract signing. Such price increases shall be documented through supplier notices, quotes, invoices or receipts. Where the delivery of material is delayed, through no fault of CentiMark, as a result of shortage or unavailability of material, CentiMark shall not be liable for any additional costs or damages associated with such delay.

This quote does not include any supplemental deck attachment as may be required by Factory Mutual Global (FM). Please note that should FM and/or you require such deck attachment, additional costs will be estimated and added as a separate item to the overall cost of this project.

Valid from 03/22/2021

DRAFT

◀◀◀ Drawing ▶▶▶

Area: Drawing

