



Black Hills Roofing

1840 Samco Rd.
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Rapid City, SD 57709
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September 13, 2019
PROPOSAL

SARNAFIL ROOF SYSTEM

Black Hills Roofing
PO Box 7740
1840 Samco Road
Rapid City, SD 57709

RE: Roofing on the Black Hills Roof Building (approximately 14,047 sf).

After conducting a complete inspection of the roofing on the above mentioned building, we propose to furnish labor and material subject to the conditions stated, for the sum of THREE HUNDRED FORTYFIVE THOUSAND, FOUR HUNDRED, NINE DOLLARS AND NO/100 (\$345409.00) – Base Price.

Scope of Work:

1. Sweep and remove loose rock ballast, clean up and haul away all debris.
2. Remove the existing asphalt wall flashing, clean up and haul away all debris.
3. Install tapered expanded polystyrene insulation to divert water to drainage locations – see enclosed plan.
4. Install 1 layer of 2" polyisocyanurate insulation using screws and rhinobond plates – R Value-12.
5. Install 1 layer of 1/4" densdeck sheet rock using screws and rhinobond plates.
6. Install white Sarnafil PVC coated sheet metal drip edge, water dam edge, scupper box, hot stack, and pourable sealer pocket flashing.
7. Install a white Sarnafil mechanically attached (60 mil certified thickness) reinforced roof membrane using the rhinobond attachment method.
8. Install white Sarnafil membrane wall base, roof top equipment curb base, and corner flashing using Sarnafil 2170 bonding adhesive.
9. Install white Sarnafil membrane prefabricated or field fabricated pipe vent boot flashing.
10. Install BHR shop fabricated 24 gauge steel kynar prefinished sheet metal cap, fascia, face clip, downspouts, conductor heads, and counter flashing - standard colors.
11. Install 5" K-Style aluminum seamless gutter using hidden attachment clips – standard colors.
12. Black Hills Roofing will supply owner with our standard 5 year labor warranty and a 10 year Sarnafil prorated material warranty upon completion and receipt of final payment.

Option 1: Install 72 mil certified thickness membrane in lieu of 60 mil certified membrane listed in scope of work line item 7. Add to the base price \$4343.00 – Initial for acceptance _____.

Option 2: Install 80 mil certified thickness membrane in lieu of 60 mil certified membrane listed in scope of work line item 7. Add to the base price 2100.00) – Initial for acceptance _____.

Sarnafil Warranty Upgrade - Choose One in lieu of warranty listed above:

- For a Sarnafil 10 year non-prorated no dollar limit labor and material warranty, add to the base price \$700.00 min. + tax – Initial for acceptance _____.
- For a Sarnafil 15 year non-prorated no dollar limit labor and material warranty, add to the base price \$980.00 min. + tax – Initial for acceptance _____.
- For a Sarnafil 20 year non-prorated no dollar limit labor and material warranty, add to the base price \$1540.00 min. + tax – Initial for acceptance _____.

NOTE: Warranties only cover materials provided by Sarnafil.

Bid Package Note: The attached drawings show the details, materials and quantities we used for bidding, modifications will require cost changes - Initial acknowledgement _____. The attached photos show existing conditions, may have comments and indicates the locations of proposed details.

Scheduling Note: We tend to run 4 to 12 weeks from contract signing. Please contact Chad Meissner (343-6488) for all information pertaining to scheduling.

Temporary Repairs / Snow Removal: Should patching be needed until the new roof installation or snow removal be required to replace the roof, we will bill associated cost at a rate of - (Time - \$75.00 / hour, material cost, plus 10%).

Project Costing Notes:

- Any cost associated with modifications to the scope of work, structure, mechanical equipment, painting, awnings, condensing units, satellite, coax cable, security camera system, communication, plumbing, electrical, venting, exterior finish system, damages caused by fastener penetration or damages caused by other trades needed to complete the roofing project will be the responsibility of the owner and paid for outside of this contract - Initial acknowledgement _____.
- Rapid City building permit and fees are included in this proposal.
- Sales tax, general liability, worker compensation and unemployment insurance are included in this proposal.
- Excise tax is included in this proposal, if supplied a prime contractors exemption certificate deduct 2% from base price.
- Removal and replacement of deficient decking and structural items is the owners responsibility. It'll be accomplished and will be billed to the owner on a cost plus 25% basis – Initial acknowledgement _____.
- Any wet, deteriorated or damaged insulation found is the owner responsibility. It'll will be replaced and will be billed to the owner on a cost plus 25% basis – Initial acknowledgement _____.
- Should owner desire any subcontracts such as mechanical or electrical to run through our contract, it will be billed to the owner on a cost plus 25% basis – Initial acknowledgement _____.
- Install new gas line and electrical conduit support blocks at approximately 8 foot on center, add to the base price \$30.00 each - Initial for acceptance _____. Note: Initial only if you want new manufactured support blocks installed.

Project Condition, Design, and Application Notes:

- The existing roof assembly is comprised of the (wood – metal) decking, 1/2" wood fiber insulation, three plies of fiberglass roofing felts set in hot asphalt and a rock surface embedded in a flood coating of hot asphalt.
- The existing roof assembly appears to be comprised of the concrete decking, fiberglass insulation – R-Value = 20 +/-, three or four plies of fiberglass roofing felts set in hot asphalt, 1" perlite insulation – R-Value = 4 +/-, three or four plies of fiberglass roofing felts set in hot asphalt, and a SBS modified cap sheet.
- Leaving the asphalt roof system serves a purpose, its useful as an air / vapor barrier. If the asphalt roof were to be removed there would need to be some sort of air / vapor barrier put back in its place. The cost of tear off and disposal would also need to be additionally accounted for. The purpose of an air barrier is to help keep the buildings pressurized air from movement into the roof system. The existing structural deck is made of tongue and groove wood that will allow air movement. Other air filtration points are the penetrations and perimeter walls. If tear off of the tar and gravel roof where to occur an appropriate air / vapor barrier would be either a 10mil poly with tape at the seams, penetrations and perimeter or a self-adhering membrane like sarnavap SA. This proposal leaves the asphalt roof in place for use of the air / vapor barrier. The interior of the structure allows for structural roof deck inspection, this is acceptable to Sarnafil and that BHR is aware of it meets building codes.
- The application of a new roof system over the existing system is acceptable in this case. Removal of the loose rock will take approximately 3 lbs. of weight off the roof structure and the new roof assembly will add approximately 2 lbs. The existing assembly the will not have to be disposed of which eliminates the associated cost such as tear off labor, hauling cost, and tipping fees.
- The application of a new roof system over the existing system is acceptable to Sarnafil. However the additional weight of the new roof system on the structure is the owners responsibility, BHR advises the owner to have a

structural survey performed by a qualified engineer. The new roof assembly will add approximately 2 lbs. per square foot of weight– Initial acknowledgement _____.

- Removal of the existing roof membrane and not the existing insulation is cost decision. The existing insulation is most likely in good condition and retains an R-Value of 16.8. Replacement of any wet or deteriorated insulation will be on an as needed basis. Option 1 will increase the R-Value by 11.2 and provide an overall roof R-Value of 28. The option is given due to the low existing roof R-Value. The existing polyisocyanurate insulation weighs approximately .50 pounds per square foot and the additional insulation in option 1 would add approximately .33 per square foot. The existing membrane and the new roof membrane weigh the same at approximately 1 pound per square foot.
- Removal of both the hot tar roof system and a membrane overlay roof system is required to remove any wet or deteriorated insulation and to inspect and replace any deteriorated structural wood decking.
- Removal of the entire existing roof assembly is required to remove any wet or deteriorated insulation and to replace any deteriorated structural wood decking.
- Removal of the entire existing roof assembly is required due to comply with the Rapid City adopted Universal Building code. It is Black Hills Roofing Company's understanding only two roof systems can be installed. With the two existing roof systems being asphalt it is not possible for one of those layers to be left in place.
- The existing exterior parapet has a through wall sheet metal counter flashing that will be too low to reuse. The inside face of the parapet wall will have a plywood substrate installed extending from the top of the wall down to the deck. This will allow the membrane to be adhered to an asphalt contamination free, straight and even vertical substrate. The membrane will extend over the top and down the exterior face where a sealant tape will be applied. BHR will install a BHR edge-tite snap-lock face clip metal to terminate the exterior of the membrane, this will replace the existing sheet metal cap flashing.
- The existing wall panels will be too low to the new roof system. BHR will cut the bottom of the panels about 4 to 12 inches, enough to meet the manufactures eight inch height requirement to any fastener or penetration. The existing walls have had numerous applications of paint that the membrane wall flashing adhesive will dissolve, which over time will leave the new membrane un-adhered and loose. BHR will install a plywood substrate for the new membrane to be applied.
- The existing roof deck is dead level, there is no slope. In order to meet Rapid City adopted building codes a minimum of 1/8" per foot slope must be maintained. BHR has elected to install a 1/4" per foot slope, settling could very well negate the 1/8" per foot slope. The most inexpensive way to add slope to a roof is to taper expanded polystyrene insulation.
- The new tapered insulation requires a hard surface to abut. 2x wood blocking will be stacked in place to a height that will be just above the highest point of the tapered insulation and densdeck cover board. The wood blocking will be installed around the front and both sides of the building matching the same height.
- Installation of a hard board substrate over the existing insulation is due to our areas hail occurrences. The densdeck hard board serves to help keep hail stones from deflecting their energy into the membrane and causing damage. In order to provide a hail warranty option Sarnafil requires that densdeck be installed. The added weight of the densdeck is 1.2 lbs. per square foot.
- Installation of a densdeck hard board acts as a separation between the asphalt roofing and the new PVC roofing. The densdeck hard board serves to help keep hail stones from deflecting their energy into the membrane and causing damage. In order to provide a hail warranty option Sarnafil requires that densdeck be installed.

- BHR fabricated sheet metal edge-tite and cap flashing, scupper head with downspouts, counter flashing, etc. are included in this proposal. See provided color chart and indicate color selection _____ - Initial acceptance _____.
- BHR shop fabricated sheet metal cap flashing, scupper heads with downspouts, and counter flashing are included in this proposal.
See provided color chart and indicate color selection:
*BHR cap / edge-tite snap-lock fascia _____ - Initial acceptance _____.
*BHR Scuppers and Downspouts _____ - Initial acceptance _____.
*BHR Counter flashing _____ - Initial acceptance _____.

Note: Suggest white to match roof color.

- New sheet metal cap flashing, scupper head with downspouts, counter flashing, etc. are included in this proposal. Removal will distort the existing sheet metal flashing and has detrimental effects to its appearance. The owner has an option to change the color as desired, a dark brown could be considered as an option to the existing copper color.
- The existing roof drain heights are fine, BHR intends to provide manufactured insulation sumps.
- There are two plumbing vents that protrude through the roof and appear to be high enough to meet the manufactures 8" minimum height requirement.
- The vent on the east side of the roof appears to be a one-way moisture relief vent. BHR intends to eliminate the vent, there should be no reason for the vent with the new Sarnafil roof system.
- There are two satellite dish antenna's that will have to be disconnected, removed and replaced in order for the roof to be replaced. The owner is required to disconnect and realign, and are required to pay for this outside of this contract.
- The existing skylights are in very bad shape, BHR suggests all are replaced! We believe the removal of the skylights will damage some and they will not be able to be returned to service. BHR will not accept any responsibility for the condition of the skylights and or their ability to keep water out of the building.
- The existing roof top equipment will be required to be disconnected, lifted, reset and or restarted by the owner's mechanical and electrical contractors. BHR requires all equipment to have the new roof membrane wrap up the penetration and extend inside the curb box. BHR will be responsible for coordination and scheduling of owner supplied mechanical and electrical contractors. Mechanical contractors will need to extend any sheet metal ducting. The existing gas line should only need to be disconnected at the unit. All roof top penetrations will need to meet a minimum height requirement of 8 inches from the new roof surface to the top of the equipment curbs. The existing power source and control wiring come up through the roof right next to the unit and leave no room to install membrane flashing. Building owner provided electrical contractor will be required to modify the existing roof top unit power source and control wiring. The condensing units will need to have the freon downloaded during to the roofing project and then the units recharged as that part of the roofing project allows. BHR will provide slip / separation membrane for the gas pipe and electrical conduit support blocks, the existing wood blocking will be reused. The owner is required to make the modifications and are required to pay for this outside of this contract.
- Black Hills Roofing Company policy is to adhered all roof membrane flashing for the walls and unit curbs. Any heat or air loss up through the roof perimeter or penetrations during cold winter temperatures will allow condensation to form on the bottom side of the membrane. This condition appears to be a nuisance leak, even though the roof is water tight from the outside. Adhering the membrane allows the heat to transfer through the

sheet and there is not an air space for water to condense. Due to humidity, temperatures, and other factors complete full adhesive is not guaranteed.

- Option 1 will increase the surface membrane from 60 mil thick to 72 mil thickness. The wall material will remain 60 mil thick due to its flexibility to conform to the roof to wall and top angle transitions and as per the manufactures recommendations.
- PVC membrane seams and edges are heat welded together unlike other roof systems which use glue and tape. The gutter drip edge will be manufactured by BHR out of Sarnafil PVC coated sheet metal. The new roof membrane will be heat welded to the gutter drip edge flashing to forms a permanent membrane to edge flashing seal.
- The membrane applied to the walls will be adhered in place using bonding adhesive unlike other system that leave the wall membrane loose and baggie. Loose wall flashings are more susceptible and prone to hail damage.
- Black Hills Roofing is not to be held accountable for asbestos containing materials. BHR will not be accountable for cost of removal, nor any claims or damages caused by its presence. BHR will be compensated by the owner for all abatement costs associated with the presence of asbestos containing material. The owner agrees to indemnify BHR from and/or against any liability, damages, claims, citations, or losses due to the presence of asbestos.
- Black Hills Roofing is not responsible for condensation, or moisture migration from the structures interior or other existing sub-structures. BHR is not to be held responsible for existing drain sizes and locations, along with the capability of drainage due to structural defects.
- The owner recognizes that odors and emissions from roofing products will be released as part of the roofing process. The owner will assume responsibility of the interior air quality. The owner will not hold BHR responsible for any claims related to fumes, odors, or emissions from roofing products during the construction process.
- Rapid City building codes govern the system design and the application of a barrier is required by that code with a combustible wood decking. The ICC-ES report is attached for your review, refer to the bright yellow highlighted designation. All application methods are contingent upon approval by the Rapid City building department and cost modifications may be necessary if not approved – Initial acknowledgement and acceptance _____.
- Rapid City building codes govern the system design. The ICC-ES report is attached for your review, refer to the bright yellow highlighted designation. All application methods are contingent upon approval by the Rapid City building department and cost modifications may be necessary if not approved – Initial acknowledgement and acceptance _____.
- The city building codes govern the system design and the application of a barrier is required by that code with a combustible wood decking. The ICC-ES report is attached for your review, refer to the bright yellow highlighted designation. All application methods are contingent upon approval by the governing building department and cost modifications may be necessary if not approved – Initial acknowledgement and acceptance _____.
- Winter and spring weather conditions slow production of the project. Removal of snow in order to accomplish the work is excluded! Should a snow event with accumulation occur, it will be the owners responsibility to remove the snow or expect delays in the new roof install.
- In order to be competitive with lessor quality products on the market, Sika is manufacturing a different

membrane that is different than the Sarnafil membrane. Other manufactures are producing a product called TPO (Thermoplastic Polyolefin) membrane to compete with Sarnafil, which is relatively new and has had its problems. BHR advocates using the Sarnafil membrane line because it is time test in the real world and not just a laboratory analysis. BHR employees have stood on thirty plus year old Sarnafil roofing projects to use as reference. Make sure our competitors are providing you with the same quality roof membrane that has a comparable track record in the field and not a lessor quality product to get the job.

- Other manufactures make their product based on nominal thickness, which is plus or minus ten percent. So when other roofing contractors say nominal thickness, you are most likely receiving the minus 10% or 54 mil thick membrane in lieu of the 60 mil indicated. It makes sense that you to ask our competitors to provide a price based on certified thickness membrane, they all can provide it. Why pay for what is stated as 60 mil membrane and only receive 54 mil membrane. This is another way companies are under bidding and undercutting, just to get jobs.

This proposal subject to revision if not accepted within 30 days from date. Thank you for the opportunity to bid your work. We look forward to doing business with you in the future. If you have any questions, please feel free to contact us.

Respectfully,

Darren J. Pichulo

***SEE NEXT PAGE FOR TERMS AND CONDITIONS**

1. Any alterations or deviations from this proposal involving extra cost will only be executed upon written orders, and will be subject to a price increase.
2. We are not responsible for conditions beyond our control, such as fire, emergencies, strikes, inclement weather that may cause a delay.
3. We will not be responsible for the additional weight of the additional roofing, it will be the owners responsibility to determine the safe loading of his building.
4. We guarantee to cover defects in workmanship only and not to extend to damage to roofing by extreme winds, lightning, hailstorms, earthquakes or other unusual causes and shall not cover any liability for damage or injury to interior, fixtures, decorations, walls, contents of building or their part of structure.
5. Our price is based on regular working hours, unless stated otherwise.
6. Prices do not include cost of performance bond.
7. It is agreed that the above guarantee shall be made and remain effective only when and if payment is made as agreed in this contract; that interest will be charged if payment becomes delinquent and this contract shall constitute and order upon the loan company or owner for payment of amount due. In the event of action for collection or to foreclose lien, holder here of shall recover court cost and attorney's fee.
8. PAYMENTS& TERMS: Payment in full upon completion or as invoiced on monthly intervals. A finance charge of 1 1/2% per month, which is an annual rate of 18%, will be charged on all accounts which become past due and a 1 1/2% additional monthly charge for each month thereafter that the account is past due.

ACCEPTANCE OF PROPOSAL: The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance _____ Authorized Signature _____