

# **City of Grand Island**

Tuesday, January 28, 2020 Council Session

# Item G-5

**#2020-20 - Approving Bid Award - Chimney Repairs 2020 at Platte Generating Station** 

Staff Contact: Tim Luchsinger, Stacy Nonhof

# Council Agenda Memo

**From:** Timothy G. Luchsinger, Utilities Director

Stacy Nonhof, Interim City Attorney

**Meeting Date:** January 28, 2020

**Subject:** Chimney Repairs 2020

**Presenter(s):** Timothy G. Luchsinger, Utilities Director

The chimney at the Platte Generating Station has a heat trace system on the top hood of the chimney to reduce the ice buildup and subsequent hazards of ice shedding from the chimney hood. Some of the heat trace has pulled out of its retaining clips and needs to be reattached. The chimney also underwent a Class 1 inspection in 2019. These inspections are performed on a regular basis by both plant personnel and chimney inspection contractors. The overall condition of the chimney was determined to be excellent, requiring only minor repairs and repainting of upper ladders and platforms, as well as, the support steel for the chimney hood.

The next outage is scheduled for April of this year. Specifications were developed by the plant staff to provide for the reattachment of the Chimney heat trace and to repaint portions of the ladders and platforms.

## **Discussion**

The specifications for the Chimney Repairs 2020 were advertised and issued for bid in accordance with the City Purchasing Code. Bids were publicly opened on January 9, 2020. Specifications were sent to six potential bidders and responses were received as listed below. The engineer's estimate for this project was \$250,000.00.

The bids were reviewed by plant management staff. The bid from R & P Industrial Chimney Co. is complete, has no exceptions, is the lowest and best bid and is compliant with specifications.

Bidder	Base Bid Amount
R & P Industrial Chimney Company – Nicholasville, KY	\$116,350.00
Industrial Access, Inc. – Cumming, GA	\$139,450.00
International Chimney Corporation, Buffalo, NY	\$140,915.00
Structural Preservation Systems, LLC – Columbia, MD	\$141,700.00
Gerard Chimney Company – St. Louis, MO	\$249,100.00

### **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

- 1. Move to approve
- 2. Refer the issue to a Committee
- 3. Postpone the issue to future date
- 4. Take no action on the issue

### **Recommendation**

City Administration recommends that the Council approve the bid of R & P Industrial Chimney Company, of Nicholasville, Kentucky as the low responsive bidder, with a bid in the amount of \$116,350.00.

## **Sample Motion**

Move to approve the bid in the amount of \$116,350.00 from R & P Industrial Chimney Company of Nicholasville, Kentucky, for the Chimney Repairs - 2020.

# Purchasing Division of Legal Department INTEROFFICE MEMORANDUM



Stacy Nonhof, Purchasing Agent

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#### **BID OPENING**

BID OPENING DATE: January 9, 2020 at 2:15 p.m.

FOR: Chimney Repairs 2020

**DEPARTMENT:** Utilities

**ESTIMATE:** \$250,000.00

FUND/ACCOUNT: 520

PUBLICATION DATE: December 12, 2019

NO. POTENTIAL BIDDERS: 7

#### **SUMMARY**

	Bidder:	R &P Industrial Chimney Co.	<b>Gerard Chimney Company</b>
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Nicholasville, KY St. Louis, MO

Bid Security: Merchants Bonding Co. Fidelity & Deposit Company

**Exceptions:** None Noted

**Bid Price:** 

 Material:
 \$ 3,500.00
 \$ 45,775.00

 Labor:
 \$112,850.00
 \$185,950.00

 Sales Tax:
 N/A
 \$ 17,375.00

 Total Bid:
 \$116,350.00
 \$249,100.00

Bidder: Industrial Access, Inc. Structural Preservation Systems, LLC

Cumming, GA Columbia, MD

Bid Security: Argonaut Insurance Co. Fidelity & Deposit Company

**Exceptions:** None None

**Bid Price:** 

 Material:
 \$ 24,293.00
 \$ 4,692.00

 Labor:
 \$106,939.00
 \$136,656.10

 Sales Tax:
 \$ 8,218.00
 \$ 351.90

 Total Bid:
 \$139,450.00
 \$141,700.00

**Bidder:** International Chimney Corporation

**Buffalo**, NY

**Bid Security:** Federal Insurance Company

**Exceptions:** None

**Bid Price:** 

Material:\$ 24,990.00Labor:\$114,380.00Sales Tax:\$ 1,545.00Total Bid:\$140,915.00

cc: Tim Luchsinger, Utilities Director Jerry Janulewicz, City Administrator Stacy Nonhof, Purchasing Agent Karen Nagel, Utility Secretary Pat Gericke, Utilities Admin. Assist. Patrick Brown, Finance Director Darrell Dorsey, PGS Plant Supt.

P2171



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# **BID SPECIFICATION PACKAGE**

for

## **CHIMNEY REPAIRS 2020**

C 128315

#### **Bid Opening Date/Time**

Thursday, January 9<sup>th</sup>, 2020 at 2:15 p.m. (local time) City of Grand Island, City Hall 100 East 1<sup>st</sup> Street, P.O. Box 1968 Grand Island, NE 68802-1968

#### **Contact Information**

<u>Darrell Dorsey</u>
City of Grand Island – Utilities Department
Platte Generating Station
308/385-5496

Date issued: December 12, 2019

# ADVERTISEMENT TO BIDDERS FOR CHIMNEY REPAIRS 2020 FOR CITY OF GRAND ISLAND, NEBRASKA

Sealed bids for Chimney Repairs 2020 will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until **Thursday, January 9, 2020 at 2:15 p.m. local time,** FOB the City of Grand Island, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall City Clerk's Office located on 1<sup>st</sup> floor of City Hall. **Submit an original and three copies if submitting by mail.** Bid package and any Addendas are also available on-line at <a href="www.grand-island.com">www.grand-island.com</a> under Business-Bids and Request for Proposals-Bid Calendar under the bid opening date. Bidding documents, plans and specifications for use in preparing bids may be downloaded from the QuestCDN website <a href="www.QuestCDN.com">www.QuestCDN.com</a> for a fee. Submitting through QuestCDN requires one original document of the bid to be uploaded. **Bids received after the specified time will not be considered**.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. Your certified check, cashiers check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

Advertised

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(All bids must be submitted on this form)

#### CHIMNEY REPAIRS 2020 BID DATA FORM

CITY OF GRAND ISLAND GRAND ISLAND, NE

The undersigned Bidder, having examined all specifications and other bidding documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the specified materials and equipment, hereby proposes to provide all materials, labor, equipment, scaffolding and supplies required to install new clips on the chimney rain hood heat trace, repair the rain hood support steel and repaint the upper 50' of interior and exterior chimney ladders and platforms FOB the City of Grand Island, freight prepaid, at the following price:

Base Bid:		EXTENDED	COST
Васс Віа.			
Material	\$	3,500.00	
Labor	\$	112,850.00	
Applicable Sales tax*	\$		
Total Base Bid	\$	116,350.00	
* If bidder fails to include sales tax in their bid p will add a 7.5% figure to the bid price for evaluation	rice or takes exception to on purposes; however, the	including sales tax i City will only pay act	n their bid price, the City tual sales tax due.
Exceptions Noted - Bidder acknowledge and those exceptions are fully explained or			
R and P Industrial Chimney Co	o., Inc	January	7, 2020
Bidder Company Name		Date	
244 Industry Parkway Nicl	nolasville,	KY 4	0356
Company Address	City	State	<b>Z</b> ip
_Robert Preston		11/1/1/1/1/1	
Print Name of Person Completing Bid		Sign	ature
Email: rpind@mis.net	Telephon		7-2265
According to Nebraska Sales and Use Tax Rec selected to file with the Nebraska Department of		7, Contractors, chec	k which option you have
Nebraska law provides a sales and the construction, repair, or anne transmission, or distribution of would be exempt, all materials are	xation of any streelectricity. Sep	ucture used fo arately stated	r the generation, contractor labor
Option 1 (Section 1-017.05) Option 2 (\$	Section 1-017.06)	Option 3 (Section 1-	017.07)
If the Nebraska sales and use tax election is under Option 1 for sales and use tax purposes.	not filed or noted above	, the contractor will	be treated as a retailer
By checking this box, Bidder acknowl <b>2020</b> .	edges the specified co	ompletion date of	the project is May 5,

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					C12	28315
By checking this box, B	Bidder acknowledges	that Addenda	Number(s)	were	received	and
considered in Bid preparation	n.					

Note: If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total base bid is not considered proprietary information and will be released pursuant to City Procurement Code.

# CHECKLIST FOR BID SUBMISSION FOR CHIMNEY REPAIRS 2020

Bids must be received by the City Clerk before 2:15 p.m. on Thursday, January 9, 2020.

The	following	items must	be completed t	for your bid	to be considered	
1110	IOIIOVVIIIG	ILCITIO ITTUOL	DC COMBICECO	oi voui biu	to be considered	

Submittal of bid documents:
<ul> <li>Option 1 – Mailing: A signed original and three (3) copies of the bidding documents. Failure to submit the correct number of copies may result in your bid not being considered.</li> <li>Note: Your certified check, cashiers check or bid bond should be clearly marked in a separate envelope attached to the signed original bid.</li> </ul>
Option 2 – QuestCDN (online): Purchase the bid specification through QuestCDN. Upload the signed original of the Bid Data Form, along with any supporting material required to meet the bid specification through QuestCDN. Upload your bid bond online through QuestCDN. Bidders using Certified check or Cashiers' Check must mail said check to the office of the City Clerk no later than the scheduled bid opening date and time and clearly marked with the project name.
Bidders must complete and sign the Bid Data Form provided in these Documents. All blank spaces must be filled in. Bidders shall acknowledge receipt of any Addenda information on the Bid Data Form.
Selection of Nebraska Sales Tax Option. If the Nebraska sales and use tax election is not filed or noted above, the Contractor will be treated as a retailed under Option 1 for sales and use tax purposes.
A reference list of at least three (3) projects of similar scope and complexity.
A list of subcontractors to be used in the performance of the work.
Firm lump sum pricing; firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
If the Contractor proposes alternative methods for consideration by the Owner other than described herein, fall and complete descriptions with separate pricing for the optional utilization of such proposed methods. References where the system has successfully been used must be included.
A proposed milestone schedule of proposed work activities.
A description of the proposed materials along with supplier data sheets and specifications on all proposed materials.
Exceptions to the specification or Owner's Contract Document.
A copy of your OSHA compliant Confined Space Procedure and Respiratory Protection Procedure.
Construction water and electrical requirements for on-site project equipment installation.
Acknowledgment of Addenda Number(s)
Please check off each item as completed to ensure compliance. If you have any questions, please feel free to contact our office prior to the bid opening date/time.

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#### **INSTRUCTIONS TO BIDDERS**

#### GENERAL INFORMATION.

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

#### 2. TYPE OF BID.

Bidders shall be required to submit prices for all items listed in the Bid Data Form.

#### 3. PREPARATION OF BIDS.

Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form must be filled in, preferably in BLACK ink, in both words and figures where required. No changes to the wording or content of the forms is permitted. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island, Nebraska.

The Bidder shall acknowledge receipt of all Addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

Individual unit pricing as listed on the Bid Data Form or supplied as supplemental information may be deemed proprietary information and not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

#### 4. SUBMISSION OF BIDS.

All Bids must be submitted intact with the correct number of copies no later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided herein. Each Bid mailed must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

#### 5. BID SECURITY.

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw their Bid for a period of thirty (30) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish a properly executed Performance Bond and Payment Bond, each in the full amount of the Contract price, within the time specified.

The Attorney-in-Fact that executes this bond on behalf of the Surety must attach a notarized copy of his/her power of attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond. Where State Statue requires, certification by a resident agent shall also be provided.

#### RETURN OF BID SECURITY.

Within fifteen (15) days after the award of the Contract, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

#### BASIS OF AWARD.

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Delivery time

Conformance with the terms of the Bid

Bid price

**Documents** 

Cost of installation

Suitability to project requirements

Responsibility and qualification of Bidder

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

#### 8. EXECUTION OF CONTRACT.

The successful Bidder shall, within fifteen (15) days after receiving notice of award, sign and deliver to the OWNER the Contract hereto attached together with the acceptable bonds as required in these Bid Documents. Within fifteen (15) days after receiving the signed Contract with acceptable bond(s) from the successful Bidder, the OWNER's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

#### 9. PERFORMANCE AND PAYMENT BONDS.

The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one (1) year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond.

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#### 10. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

#### 11. GRATUITIES AND KICKBACKS.

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

#### 12. FISCAL YEAR.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

#### **CONTRACT AGREEMENT**

THIS AGREEMENT made and entered into by and between [SUCCESSFUL BIDDER], hereinafter called the Contractor, and the CITY OF GRAND ISLAND, NEBRASKA, hereinafter called the City.

#### WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *CHIMNEY REPAIRS 2020;* and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

<u>ARTICLE I</u>. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

- 1. This Contract Agreement.
- 2. City of Grand Island's Specification for this project.
- 3. [NAME OF SUCCESSFUL BIDDER] bid signed and dated [DATE OF BID].

In the event of an conflict etw en the rms c to Conflict Document the provisions of the document first listed shall p variable.

ARTICLE II. The the Contractor shall (a furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of [DOLLAR AMOUNT] (\$00.00) for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

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Base Bid:	\$ .00
Sales Tax on Materials/Equipment:	\$ .00
Sales Tax on Labor:	\$ .00
Total	\$ .00

Contractor Tax Option

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the CHIMNEY REPAIRS 2020.

<u>ARTICLE V</u>. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Platte Generating Station, and complete the work on or before *May 5, 2020*.

ARTICLE VI. The points for a rees to comply it hall a pincapie State air labor standards in the execution of this Control is control of the execution of the control of the

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter,

pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL BIDDER]	
Ву	Date
Title	
CITY OF GRAND ISLAND, NEBRASKA	
By Mayor	_ Date
Attest:City Clerk	
The Contract is in due form according to law and	hereby annual te
Attorney for the Ci	



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#### REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska. \* If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Mailed bids shall include the following on the **outside** of the mailing envelope: "Chimney Repairs 2020". All bids submitted by mail must include <u>an original and three copies</u> of the bid. The bid specification and on-line bidding forms are also available at <a href="http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar">http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar</a> under the bid opening date and "Click here for bid document link" through QuestCDN. If submitting through QuestCDN, <u>one</u> original document of the bid is required to be uploaded. No verbal bids will be considered. All sealed bids are due no later than Thursday, **January 9, 2020 at 2:15 p.m. local time**. to:

Mailing Address: City Clerk

City Hall

P. O. Box 1968

Grand Island, NE 68802-1968

Street Address: City Clerk

City Hall

100 E. First Street

Grand Island, NE 68801

Bids will be opened at this time in the City Hall City Clerk's Office located on 1<sup>st</sup> floor of City Hall. Any bid received after the specified date will not be considered.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968
Phone (308) 385-5496 / FAX (308) 385-5353

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The equipment and materials must be new, the latest make or model, unless otherwise specified. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the equipment to confirm compliance with specifications. Any equipment or material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashier's check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the Bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Successful bidder shall comply with the City's insurance requirements; performance and payment bonds are required for this project as outlined in the Detailed Specifications and Instructions to Bidders. All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. If exceptions and/or clarifications are noted to the bid, those exceptions must be fully explained on a separate sheet, clearly marked, and included with the Bid. Any changes that are found made to the original bid specification, other than Owner generated Addendums, would result in your bid not being considered. Please contact Darrell Dorsey at 308-385-5495, for questions concerning this specification.

Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968 Phone (308) 385-5496 / FAX (308) 385-5353

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# Chimney Repairs 2020 Detailed Specifications

I. <u>Scope</u>: The Contractor shall provide all materials, labor, equipment, scaffolding and supplies required to install new clips on the Chimney rain hood heat trace, repaint the rain hood support steel and repaint the upper 50' of interior and exterior chimney ladders and platforms.

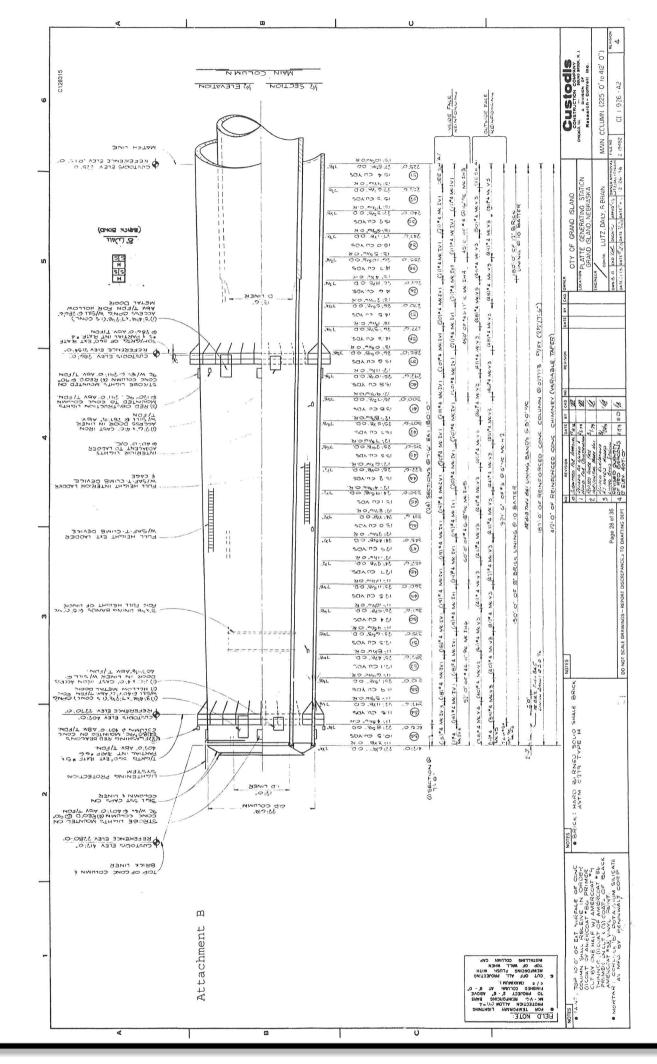
This contract will be awarded to a single prime Contractor for the full scope of services. The Contractor shall provide a qualified Superintendent who shall be responsible for coordinating all aspects of the specified scope of work, including coordination of all work provided by such subcontractors as may be utilized by the prime Contractor and coordination with other work in progress performed by Platte Generating Station (PGS) and such other contractors as may be on site.

- II. Plant Description: The Platte Generating Station is located at 1035 West Wildwood Drive, approximately two miles south of Grand Island, Nebraska. The plant entrance is located two (2) miles south of U.S. Highway 34 and 1 ½ miles east of U.S. Highway 281. The Unit 1 steam generator is a natural circulation, superheat/reheat, pulverized coal-fired boiler manufactured by ABB-CE (CE Contract No. 13477). The steam generator produces 765,000 lb/hr (MCR) of steam at 1000° F and 1800 psi which is delivered to a 100,000 kw steam turbine. In 2014, the plant added environmental controls for mercury removal and reduction of acid gases and particulates, changing the flue gas exit conditions.
- III. <u>Chimney Description</u>: The chimney is a 412' tall concrete shell with a 415.5' full height, independent, acid resistant brick liner. There are two full height ladders, one on the exterior and one in the airspace. It is equipped with three 360 degree external platforms at the 170', 285', and 402' elevations. Obstruction lighting, consisting of four strobes and beacon lights, are mounted at the 285' and 402' elevations. It has eight lightning protection points and two down-lead cables. There is a fiberglass rain hood at the top of the chimney column to cover the airspace opening. The chimney is not equipped with an elevator. The dimensions are as follows:

Height	415.5'
Outside Diameter, concrete shell top	22'-6"
Outside Diameter, concrete shell base	38'-11"
Inside Diameter, brick liner top	12'-0"
Inside Diameter, brick liner base	16'-1"
Breeching Inlet, north quadrant, 18' elevation	10' X 25'

<sup>\*</sup>Refer to Attachments A & B for Original Stack Drawings

The entire chimney underwent a full inspection in 2019 and was found to be in excellent condition.



## **Custodis-Cottrell**

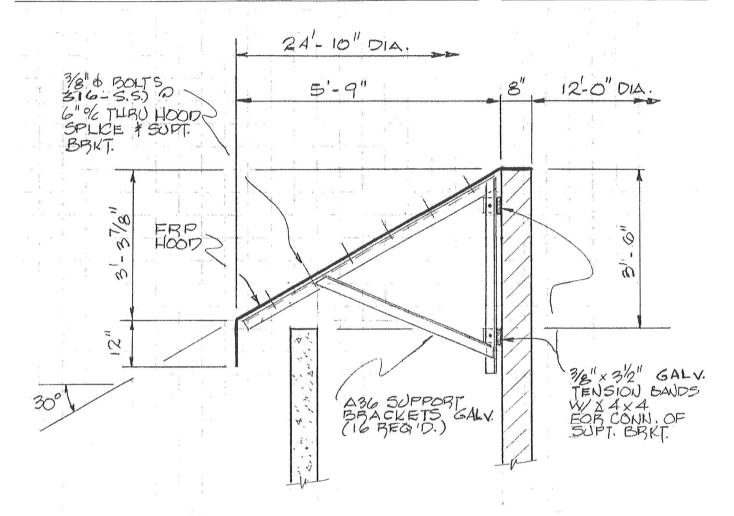
A Research-Cottrell Company

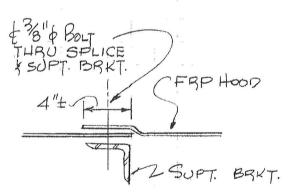
PROJECT CITY OF GRAND ISLAND, NEBRASKA

CHIMNEY REPAIRS
SUBJECT FRP RAIN HOOD

Attachment G

FILE	PAGE NO.
2-19857	
BY WS	DATE 7/29/93
CK ·	REV





HOOP SPLICE

SECTION THRU BAN HOOD

Page 29 of 35

#### DETAILED SPECIFICATIONS

<u>SCOPE</u>. Furnish all material and labor to repair the Platte Generating Station chimney in accordance with the following specifications.

DESCRIPTION. The Platte Generating Station is located at 1035 W. Wildwood Drive, two miles south of Grand Island, Nebraska. The chimney consists of a reinforced concrete shell with a self-supported liner of acid-resistant brick designed and constructed by Custodis Construction Company. The chimney was damaged by high winds and the work will consist of repair of chimney components to the original condition, except as noted. The attached four drawings are for reference only in indicating the scope of the repair work to be performed. The Contractor shall be responsible for determining actual dimensions and materials.

CHIMNEY REPAIR. The following repairs are to be made to the chimney. These are intended to be descriptive and not indicate the work in detail. All materials and labor required for a complete repair shall be furnished by the Contractor.

- 1. Replace four sections of handrail on Exterior Platform No. 5 (El. 402).
- 2. Replace grating on three test platforms on Interior Platform No. 2 (El. 170).
- 3. Replace three sections of grating, brackets, stringers, and handrails on Exterior Platform No. 1 (El. 170).
- 4. Replace one test probe hoist beam and supports (El. 170).
- 5. Replace one 3x7 metal door (El. 170).
- 6. Replace lightning rods and other damaged components of lightning protection system.
- 7. Install additional brick liner section and new rain hood and supports in accordance with the following specifications.

Rain hood. The Contractor shall install approximately three to four feet of acid resistant brick to the top of the existing liner to accommodate installation of a new rain hood. The new rain hood shall be constructed of sections of fiberglass sloping from the liner down to the external diameter of the concrete shell at approximately 30 degrees and then vertically down for an adequate overhang to prevent rain and fly ash from entering the annulus. The fiberglass shall be supported by steel supports attached to steel bands around the liner. All rain hood sections and support steel bolting shall be stainless steel. The rain hood shall be designed for a minimum wind pressure of 31 psf. The support steel shall be provided with a coating suitable for the service conditions.

EXTRA WORK. The Contractor shall advise the City immediately of repairs required in addition to the above items. Extra work shall be authorized by the City prior to performing the work.

SCHEDULE. The plant is scheduling a maintenance outage from 9:00 am on October 8, 1993 until 12:00 noon on October 14, 1993. Any of the above repairs requiring the chimney to out of service must be completed during this time period. All repair work must be completed by October 29, 1993.

REFERENCES. A list of recent previous projects of similar scope and reference contacts shall be furnished with the Quotation.

INSURANCE. The Contractor shall comply with the attached INSURANCE REQUIREMENTS during the project.

Page 30 of 35

#### Attachment D

City of Grand Island
Platte Generating Station
Chimney Repairs

#### Technical Clarifications

#### A. FRP Rain Hood

#### 1. <u>Materials</u>

- (a) Resin Hetron 197 with antimony trioxide fire retardant additive.
- (b) Laminate Construction The Corrosion liner will be on C-veil and two 1.5 oz./sq. ft. chopped strand. The remaining laminate will be alternating layers of 1.5 oz./sq. ft. chopped strand and 24 oz./sq. yd. woven roving.

#### 2. Supports

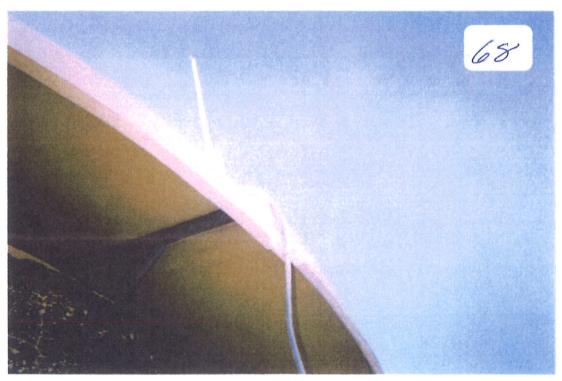
- (a) The support brackets and tension band are A36 galvanized.
- (b) The bolts connecting the FRP to the brackets and the bolts connecting the brackets to the bands are S.S. 316 material.

#### 3. <u>Miscellaneous</u>

(a) The hood will be fabricated in 16 panels. One panel of the hood will include a 20" square access hatch.

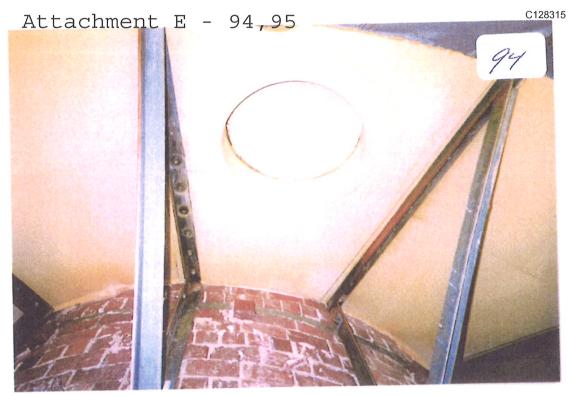


Photograph 67 thru 68 – NOTE: The FRP rain hood and LPS points were found to be in good condition.



Photograph 68

Page 32 of 35



Photograph 94



Photograph 95

Page 33 of 35



#### DT-AS-50, RM-25-AL CLIPS

#### Stock And Specialty Roof Clips

# **DESCRIPTION**

The DT-AS-50 and RM-25-AL are stock roof clips for asphalt shingle and metal roofs.

#### STOCK CLIPS

#### **DT-AS-5020 AND DT-AS-5036**

Aluminum clips for asphalt shingle roofs (package of 50). The 5020 model has 20 holes for adhesive strength while the 5036 is slightly larger with 36 holes for additional adhesive strenth.Clips can be on installed on asphalt shingle and metal roof materials using SB-190 adhesive

#### **RM-25-AL**

Aluminum clips for metal roofs (package of 25). Clips can be installed on standing seam metal roofs using SB-190 adhesive (SB-190 cannot be used on copper materials or rubber membrane materials) or VHB pads (VHB pads cannot be used on asphalt shingles or rubber membrane materials).

#### **SPECIALTY CLIPS**

Specialty clips are available by special order.

#### S5S CLIP & CLAMP

Single run aluminum clip and clamp for attachment to standing seams on metal roofs.

Single run copper clips for metal roofs (package of 25).

#### **RM-AL6 AND RM-CU6**

Dual run aluminum or copper clips for metal roofs.

#### **RS-STR-CU AND RS-STR-CU6**

13.5" hooked copper strap with single and dual run clips for slate or cedar shake shingle. Custom lengths available.

#### RR-STR-CU AND RR-STR-CU6

13.5" slotted copper strap with single and dual run clips for slate or cedar shake shingle. Custom lengths available.

#### INSTALLATION

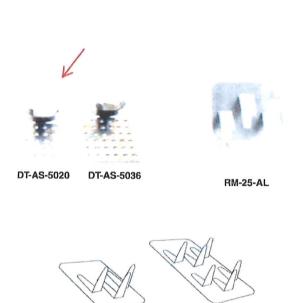
Please refer to adhesive directions for minimum application temperature and duration of adhesive curing time before installing the de-icing cable. Check primer requirements if using VHB pads.

RS and RR clips are mechanically fastened and do not require adhesive.

Copper clips are soldered to copper roof materials.

(847) 526-2407 Fax (847) 526-4456 (800) 526-7887

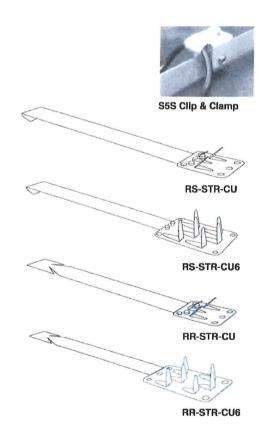




RM-25-CU

RM-AL6

RM-CU6



DELTA-THERM Corporation, P.O. Box 345, Wauconda IL, 60084



# MINERAL INSULATED (M.I.) ROOF DEICING CABLE ASSEMBLY One Conductor And Two Conductor

#### DESCRIPTION

One Or Two Conductor

Magnesium Oxide Insulation -

Alloy 825 Seamless Sheath

Heating Cable

Heating Elements

Mineral insulated (M.I.) cable consists of one or two conductor heating elements embedded in highly compressed magnesium oxide covered by a copper sheath which can be covered by a high density polyethylene (HDPE) overjacket. Application requirements determine resistance size and sheath material.

#### **TERMINATION CONSTRUCTION**

Each Delta-Therm M.I. cable assembly is fully terminated and moisture proof. The end termination consists of a 5' (152cm) thermal gradient section connected to 20' (6m) THWN cold leads. The cold leads are crimped and soldered to the thermal gradient section, insulated with a high-dielectric, high-temperature tape, and epoxy potted in a rigid brass sleeve. The thermal gradient section is silver soldered to the heating element and protected by a rigid brass sleeve packed with magnesium oxide.

#### **COLD LEADS**

The 19-strand THWN wire connects to an electrical circuit. Standard cold lead length is 20' (6m). Leads can be ordered at any length, allowing junction boxes to be placed in remote, dry locations.

#### **NUMEROUS VOLTAGES**

Delta-Therm can design M.I. roof and gutter deicing cable assemblies for any voltage up to 600 volts.

#### **FLEXIBLE**

M.I. cable is annealed (annealing tempers metal and removes brittleness) and easy to form and install. Irregular areas and obstacles are easily accommodated

#### **ROOF MATERIALS**

M.I. cable can be installed on most common roof materials.

#### HDPE JACKETING

Extruded, high-density polyethylene jacketing adds physical strength and protects against corrosives such as calcium chloride and salt.

#### **FIRE RESISTANT**

M.I. cable construction will not contribute to or cause an electrical fire

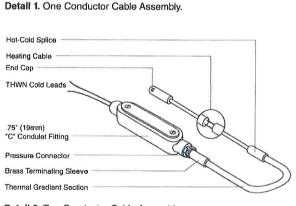
#### **NO DEGRADATION**

Delta-Therm M.I. cable is made of inorganic materials. Degradation of M.I. cable is negligible when compared to cables made of organic materials such as plastic.





(847) 526-2407 Fax (847) 526-4456 **(800) 526-7887** 



Detail 2. Two Conductor Cable Assembly.

One Or Two Conductor Heating Elements

Magnesium Oxide Insulation -

Copper Seamless Sheath

HDPE Overjacket

Thermal Gradient

.75" (19mm)
"T" Condulet Fitting
THWN Cold Leads

Pressure Connector

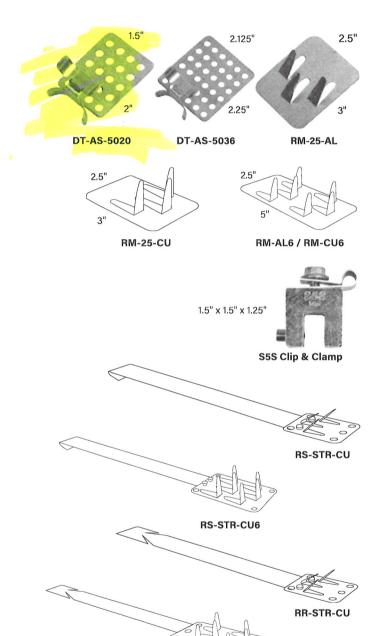
Brass Terminating Sleevel
Hot-Cold Splice

DELTA-THERM Corporation, P.O. Box 345, Wauconda IL, 60084



# **Stock and Specialty Roof Clips**

#### **Aluminum and Copper**



**NOTE:** Do not use DT-AS-50 clips with VHB pads. Do not use SB-190 with copper or rubber membrane materials.

RR-STR-CU6

#### DESCRIPTION

The DT-AS-50 and RM-25-AL are stock roof clips for asphalt shingle and metal roofs.

#### STOCK CLIPS

DT-AS-5020 and DT-AS-5036

Aluminum clips for asphalt shingle roofs (package of 50). The 5020 model has 20 holes for adhesive strength while the 5036 is slightly larger with 36 holes for additional adhesive strenth. Clips can be on installed on asphalt shingle and metal roof materials using SB-190 adhesive

#### RM-25-AL

Aluminum clips for metal roofs (package of 25). Clips can be installed on standing seam metal roofs using SB-190 adhesive (SB-190 cannot be used on copper materials or rubber membrane materials) or VHB pads (VHB pads cannot be used on asphalt shingles or rubber membrane materials).

#### SPECIALTY CLIPS

Specialty clips are available by special order.

#### S5S CLIP & CLAMP

Single run aluminum clip and clamp for attachment to standing seams on metal roofs.

#### RM-25-CU

Single run copper clips for metal roofs (package of 25).

#### RM-AL6 AND RM-CU6

Dual run aluminum or copper clips for metal roofs.

#### **RS-STR-CU AND RS-STR-CU6**

13.5" hooked copper strap with single and dual run clips for slate or cedar shake shingle. Custom lengths available.

#### RR-STR-CU AND RR-STR-CU6

13.5" slotted copper strap with single and dual run clips for slate or cedar shake shingle. Custom lengths available.

#### **INSTALLATION**

Please refer to adhesive directions for minimum application temperature and duration of adhesive curing time before installing the de-icing cable. Check primer requirements if using VHB pads.

RS and RR clips are mechanically fastened and do not require adhesive.

Copper clips are soldered to copper roof materials.

Delta-Therm Corporation 6711 Sands Road Ste A, Crystal Lake, IL 60014 www.delta-therm.com 800-526-7887

ACC\_RClips\_1910\_DS



# CHEMBUILD® SERIES 135

PRODUCT DATA SHEET

#### PRODUCT PROFILE

**GENERIC DESCRIPTION** Modified Polyamidoamine Epoxy

High-build coating with superior wetting for marginally prepared rusty steel and tightly adhering old coatings. Excellent abrasion-, chemical- and corrosion-resistance. Perfect foundation for aliphatic-polyurethanes. NOT FOR IMMERSION SERVICE. COMMON USAGE

**COLORS** DC74 Off-White, 1243 Metallic Aluminum and more: refer to Tnemec Color Guide.

Note: Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause

yellowing to occur.

FINISH Semi-gloss

PERFORMANCE CRITERIA Extensive test data available. Contact your Tnemec representative for specific test results.

#### **COATING SYSTEM**

PRIMERS

**Steel:** Self-priming **Galvanized Steel and Non-Ferrous Metal:** Self-priming

**TOPCOATS** 

Series 6, 30, 35, 66, L69, L69F, N69, N69F, V69F, V69F, 73, 84, 104, 115, 161, 1028, 1029, 1070, 1071, 1072, 1074, 1074U, 1075, 1075U. **Note:** When topcoating with Endura-Shield polyurethane finish, exterior exposed Series 135 has the following maximum time to recoat: Series 73, 1074/1074U or 1075/1075U, 60 days. Series 1070, 1071 or 1072, 14 days. If these times are exceeded, an epoxy intermediate coat or scarification is required before topcoating. Refer to appropriate topcoat data sheet for additional information.

#### SURFACE PREPARATION

Abrasive blast cleaning to SSPC-SP6/NACE 3 generally produces the best coating performance. If conditions will not permit this, Series 135 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces. STEEL

**GALVANIZED STEEL & NON-**Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec

> To Touch 6 hours at 5.0 mils DFT

(125 microns)

**FERROUS METAL** representative or Tnemec Technical Services. **PAINTED SURFACES** Test patch is recommended.

ALL SURFACES Must be clean, dry and free of oil, grease and other contaminants

#### TECHNICAL DATA

**VOLUME SOLIDS** 84.0 ± 2.0% (mixed) †

CURING TIME

**RECOMMENDED DFT** Conventional Build: 4.0 to 6.0 mils (100 to 150 microns) per coat.

Hi-Build: 7.0 to 9.0 mils (180 to 230 microns) per coat

Note: Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact

To Handle

18 hours

To Recoat

24 hours

your Tnemec representative. Temperature

75°F (24°C)

Curing time varies with surface temperature, air movement, humidity and film thickness.

EPA Method 24 **Unthinned:** 0.72 lbs/gallon (86 grams/litre) **Thinned 15% (No. 19 Thinner):** 1.91 lbs/gallon (229 grams/litre) **Thinned 15% (No. 18 Thinner):** 2.05 lbs/gallon (246 grams/litre) **Thinned 15% (No. 62 Thinner):** 0.72 lbs/gallon (86 grams/litre) † **VOLATILE ORGANIC COMPOUNDS** 

HAPS Unthinned: 1.29 lbs/gal solids

Thinned 15% (No. 19 Thinner): 2.54 lbs/gal solids Thinned 15% (No. 18 Thinner): 1.29 lbs/gal solids

THEORETICAL COVERAGE 1,347 mil sq ft/gal (33.1 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS Two: Part A and Part B

> MIXING RATIO By volume: Four (Part A) to one (Part B)

PACKAGING Five-Gallon Kit: Consists of four gallons of Part A in a five-gallon pail and one gallon of Part B in a one-gallon can. When mixed, yields five gallons (18.9L)

One-Gallon Kit: Consists of a partially filled one-gallon can of Part A and a partially filled one-quart can of Part B. When mixed, yields one gallon (3.79L).

**NET WEIGHT PER GALLON** Series 135:  $12.30 \pm 0.25$  lbs  $(5.58 \pm .11 \text{ kg})$  (mixed) 135-1243: 11.52  $\pm$  0.25 lbs (5.23  $\pm$  .11 kg) (mixed)  $\dagger$ 

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 120°F (49°C)

**TEMPERATURE RESISTANCE** (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE 24 months at recommended storage temperature. FLASH POINT - SETA Part A: 75°F (25°C) Part B: 201°F (94°C)

Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material **HEALTH & SAFETY** 

Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children.** 

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Page 1 of 2

# CHEMBUILD® | SERIES 135

#### APPLICATION

#### **COVERAGE RATES**

Conventional Build (Spray, Brush or Roller)

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	5.0 (125)	6.0 (150)	269 (25.0)
Minimum	4.0 (100)	5.0 (125)	337 (31.3)
Maximum	6.0 (150)	7.0 (180)	224 (20.8)

High-Ruild (Spray Only)

(-)	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	8.0 (205)	9.5 (240)	168 (15.6)
Minimum	7.0 (180)	8.5 (215)	192 (17.8)
Maximum	9.0 (230)	11.0 (280)	150 (13.9)

**Note:** Can be spray applied at 7.0 to 9.0 mils (180 to 230 microns) DFT per coat when extra protection or the elimination of a coat is desired. Can be sprayed at 4.0 to 6.0 mils (100 to 150 microns) DFT per coat for use in systems requiring a conventional build. Brush or roller will normally achieve the 4.0 mil (100 microns) minimum for conventional build application. However, under certain conditions some colors may require two coats to achieve suggested film thickness. Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating

MIXING

Power mix contents of each container, making sure no pigment remains on the bottom. Add the contents of the can marked Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. **Note**: Both components must be above 50°F (10°C) prior to mixing. For application to surfaces between 50°F to 60°F (10°C to 16°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, blended components should be above 60°F (16°C).

THINNING

For air or airless spray, thin 10% to 15% or 3/4 pint to 1 1/4 pints (380 to 570 mL) per gallon with No. 19 or No. 62 Thinner. For brush or roller, thin 10% to 15% or 3/4 pint to 1 1/4 pints (380 to 570 mL) per gallon with No. 18 or No. 62

**POT LIFE** 

8 hours at 50°F (10°C) 4 hours at 77°F (25°C) 2 hours at 100°F (38°C)

#### APPLICATION EQUIPMENT

Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E .070"	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	70-90 psi (4.8-6.2 bar)	20-30 psi (1.4-2.1 bar)

Low temperatures or longer hoses require higher pot pressure

**Airless Spray** 

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.017"-0.021"	3000-4200 psi	1/4" or 3/8"	60 mesh
(430-535 microns)	(207-290 bar)	(6.4 or 9.5 mm)	(250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

Note: Series 135-1243 must be applied by brush or roller to achieve aluminum appearance. For spray application, contact

your Tnemec representative. **Roller:** Use 3/8" or 1/2" (9.5 mm or 12.7 mm) synthetic woven nap covers. Brush: Use high quality natural or synthetic bristle brushes.

**SURFACE TEMPERATURE** 

Maximum 135°F (57°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Note: Amine blush may develop during cure if the surface temperature drops below the minimum, particularly under high humidity. Blush must be removed prior to topcoating; contact your Tnemec representative.

CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner or MEK.

† Values may vary with color.

WARRANTY & LIMITATION OF SELLER'S LIABILITY: Themec Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Themec Company, Inc. THE WARRANTY DESCRIBED IN THE ABOVE PARACRAPH SHALL BE IN LIE! OF ANY OTHER WARRANTY, EXPRESSED OR IMPILED, INCLL'DING BLIT NOT LIMITED TO, ANY IMPILED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICILAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The buyer's sole and exclusive remedy against Themec Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Themec is willing to provide comparable replacement product to the buyer. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROPITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Themec Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.

Tnemec Company Inc. 6800 Corporate Drive Kansas City, Missouri 64120-1372 1-800-TNEMEC1 Fax: 1-816-483-3969 www.tnemec.com

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PDS135 Page 2 of 2

IV. <u>Existing Rain Hood</u>: The original liner caps which were damaged by high winds, were removed and a new FRP rain hood installed on the chimney in 1993. The Attachments show the new FRP rain hood.

That project involved installing an additional 3.5 feet of acid resistant brick to the top of the existing liner, installing galvanized 3"x3"x3/8" A36 steel supports attached with 3/8"x3.5" steel bands installed around the liner, 3/8" 316 SS bolting for installation of the new fiberglass rain hood and reinstallation of the lightening protection system.

The new hood was fabricated in 16 panels, of Hetron 197 resin with antimony trioxide fire retardant in a laminate construction consisting of alternating layers chopped strand and woven roving. The hood was designed for a minimum wind pressure of 31 psf. One 24" diameter flat manway cover was provided as seen in the Drone Photo DigitalSky-9. Refer also to Attachments for the specification and technical clarifications on the existing rain hood.

Rain Hood Icing Conditions: In the fall of 2014, the station put a new scrubber into service that changed the general stack outlet conditions to a lower sulfur, lower temperature and higher moisture flue gas, creating more severe icing on the rain hood. The plant therefor installed a heat trace system on the rain hood, held in place by clips that were epoxied to the rain hood.

V. <u>Project Goals and Requirements</u>: Photos in the Attachments show the current condition of the heat trace. There are 16 hood panels with 40 heat trace loops. Most of the upper clips and many of the middle clips have pulled loose from the hood. The cables shall be laid back down in place with new clips which shall be attached to the hood by hand-layed fiber glass matting buildup using Hetron FR 992 FR/CR Epoxy Vinyl Ester resin with a UV protectant gel coating application. Each loop shall have 2 new clips installed at the top and 2 new clips installed half the distance down from the top for a total of 160 new clips.

Under the rain hood, hand and power tool prep the platform structural steel and coat with a rust inhibiting coating.

On the top platform, hand and power tool prep the platform structural steel and coat with a rust inhibiting coating. Replace all grating clips with stainless steel clips.

Hand and power tool prep the top 50 feet of the exterior ladder and coat with a rust inhibiting coating. Do not coat the safety rail.

Coating systems shall be suitable for application over any rusty steel and old coatings that may be left behind after the hand and power tool prep, such as Amerlock 2/400, Carbomastic 15 or comparable. Bidder shall submit coating system details with the proposal.

The Contractor shall furnish all necessary materials, supplies, tooling, equipment and labor, including but not limited to material handling, blasting and cleaning equipment, compressed air, materials, sundries and personal protective equipment for its employees. Electrical power will be available at the plant site.

<u>REQUIREMENTS:</u> If the Contractor proposes alternative methods for consideration by the Owner other than as generally described herein for any portion of the work, full and complete descriptions **must be included with the bid** with separate pricing for the optional utilization of such proposed methods. References where the system has successfully been used must be included.

Bidder is solely responsible for obtaining any and all clarifications to this specification as may be required for the Bidder to submit an accurate and complete bid proposal.

Contractor will coordinate closely with PGS personnel on execution of all phases of the work and all safety requirements, including but not limited to:

- Provide information on all employees arriving at PGS
- Lock Out/Tag Out
- Confined Space Entry
- PGS Equipment Operation, such as fans and dampers
- Scheduling sequence of work scope items and related plant system preparations for work execution
- Inspections of completed work

QUALIFICATIONS: The Contractor shall be a firm specializing in the provision of services as outlined within this scope for large-scale utility chimneys used in the electric power industry. The Contractor shall substantiate its experience through the submittal of three (3) similar projects' reference list with the bid. The Contractor will be expected to perform the work without the assistance of Platte Generating Station personnel or tools, and comply with plant safety regulations and equipment lockout/tag out procedures.

<u>SUPERINTENDENT:</u> The Contractor shall provide well qualified supervisor(s) and a Job Superintendent who will fully direct all field operations for the duration of the project, serve as liaison to the Owner's designated representatives, be fully authorized to make any and all decisions affecting the work in the field and coordinate activities between the Contractor and its subcontractors, if any.

<u>SAFETY:</u> The Contractor is an Independent Contractor required to follow their OSHA regulations for work in areas that are contaminated with fly ash and for areas that may be considered as confined spaces. NOTE: All contractors must submit **with the bid** a copy of their OSHA compliant Confined Space Procedure and Respiratory Protection Procedure. The Contractor will be required to provide proof that workers have successfully completed respiratory fit testing and pulmonary function testing and have been trained for confined space entry.

The Contractor shall be responsible for compliance with all safety practices as required by the regulatory agencies governing the Contractor's operations as well as any and all safety requirements of the Contractor's organization and shall submit historical evidence of such compliance. All personnel working on site will be required to participate in the plant's safety orientation prior to performing any work on site at PGS.

The plant has an equipment lockout/tag out procedure to prevent the unauthorized starting of motors and the unauthorized movement of valves and dampers. The Contractor is required to use the procedure and add its own locks/tags on top of the plant lock/tags if required. Removal of plant locks/tags is not allowed and is cause for removal from the plant site.

#### OWNER PROVISIONS: Platte Generating Station (PGS) will provide:

- An owner's designated representative for on-site coordination with PGS.
- Safety orientation for all contractor employees as related to PGS site safety considerations.
- Dumpsters for trash and debris.
- Portable toilet facilities with hand wash stations.
- Potable water source for contractor's drinking water containers.
- Designated contractor parking on site.
- Electrical service connections for job trailers and equipment.

<u>INSPECTION:</u> All work performed by the contractor will be inspected by the owner's designated representative or other assigned personnel upon notification by the Contractor that the contractor considers that portion of the work completed. The Contractor will be required to re-work any areas found to be inadequate.

- VI. Submittals: Submittals to include with the bid, include but are not limited to:
  - A. Detailed description of the proposed materials along with supplier data sheets and specifications on all proposed materials.
  - B. Milestone Schedule.
  - C. Construction water and electrical requirements for on-site project equipment installation.
  - D. A reference list of recent projects similar in unit size, scope, and complexity to this specification shall be provided with the bid.
  - E. A list of subcontractors to be used in the performance of the work.
  - F. A summary of the experience of the Superintendent proposed for this project.
- VII. <u>Service Rates</u>: The Contractor shall include, in the Bid, a firm, lump sum price necessary to perform the heat trace clip attachments, platform and ladder steel coating in accordance with the specifications. This firm Bid shall include all expenses, and all other standard terms and conditions to be effective during the project. The Bid shall also include firm unit pricing for additions, or adjustments, which may be required outside of the specified scope of services or due to modifications as may be requested by the Owner in the progress of the work.

The Platte Generating Station is <u>NOT</u> tax exempt and is subject to a 7.5% sales tax rate. See the Nebraska Department of Revenue web site at <u>www.revenue.state.ne.us</u> for contractor's tax information.

VIII. <u>Schedule</u>: The plant is currently scheduled for a shutdown **April 23 - May 7, 2020**. The work shall be completed to allow firing of the unit by the end of the day May 5<sup>th</sup>. The Contractor may perform such work as can be completed with the unit on-line prior to the outage and may continue work if necessary after the outage is over to such extent as the work does not interfere with the operation of the unit. The Bidder shall submit a preliminary milestone schedule of proposed work activities

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with the bid proposal.

- IX. <u>Evaluation</u>: The bids will be evaluated on the basis of cost and conformance with the specified scope of work, as well as, responsiveness to the requirements of the specification, anticipated design effectiveness, completeness of submittals, experience, schedule and other such factors as deemed applicable to the project.
- X. Safety: The Contractor is required to follow all OSHA, state, and plant safety regulations.
- XI. <u>Materials, Equipment, and Services provided by the Contractor:</u> The Contractor shall provide all material, freight, equipment, labor, personnel protective equipment, tools, consumables, and supervision to fully perform the specified work without the assistance of City personnel.
- XII. <u>Plant Access</u>: Access to the plant will be available at all times and the Contractor may determine working hours, however, the plant engineering staff will only be available during normal, daytime, weekday working hours.

There is no separate contractor entrance at the Platte Generating Station. There is one gate with a card access security system and the Contractor may request to use access cards to gain entry rather than request entry for each entrance and exit. If cards are used the Contractor shall be responsible to return all access cards after the outage. There is a \$25.00 charge for every card that is not returned.

XIII. <u>Contact</u>: Questions regarding this specification may be directed to Darrell Dorsey at the Platte Generating Station, telephone (308) 385-5492.

#### XIV. Attachments:

Digital Sky -9	Drone Hood Photo
65-12	ladders and Platforms
65-13	ladders and Platforms
65-20	ladders and Platforms
65-24	ladders and Platforms

Attach A Chimney
Attach B Chimney

Attach CDG FRP Rain Hood

Attach E Photos Rain Hood Support Steel

Clips Heat Trace Clips

Heat Trace Heat Trace

Hetron Data Sheet

XV. <u>Insurance Requirements</u>: The City's insurance requirement is attached.

XVI. Performance and Payment Bonds: The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

# MINIMUM INSURANCE REQUIREMENTS CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the Bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve Bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

#### 1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation Employers Liability Statutory Limits \$100,000 each accident \$100,000 each employee \$500,000 policy limit

#### 2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$ 500,000 Combined Single Limit

#### 3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall not be less than the following:

**Bodily Injury & Property Damage** 

\$ 500,000 each occurrence \$1,000,000 aggregate

#### **4. UMBRELLA LIABILITY INSURANCE**

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$1,000,000 each occurrence \$1,000,000 general aggregate

#### 5. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

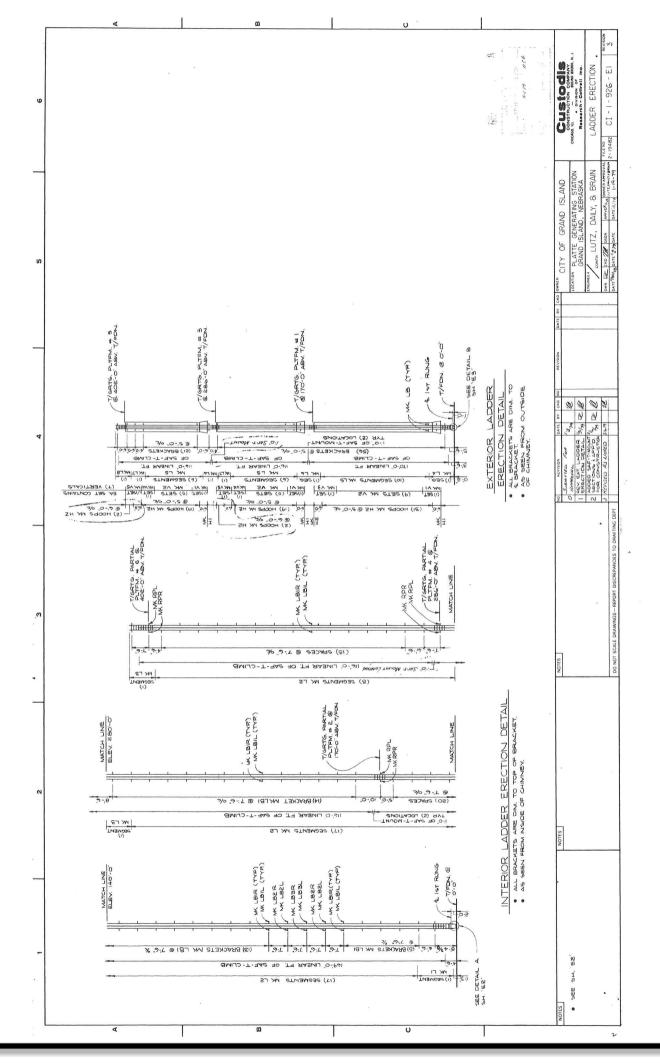
The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

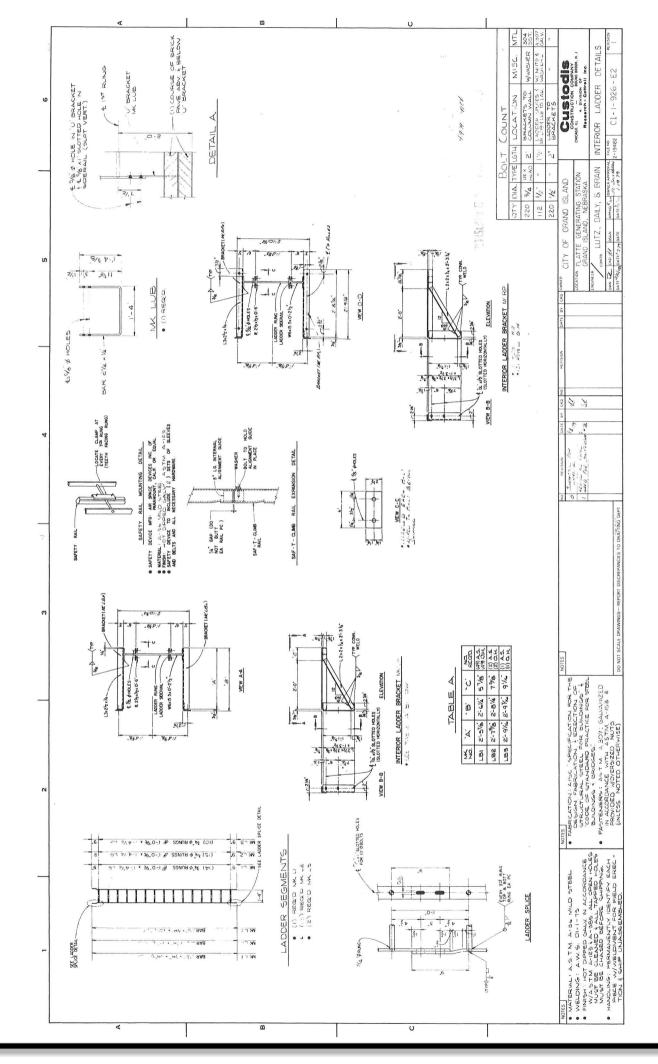
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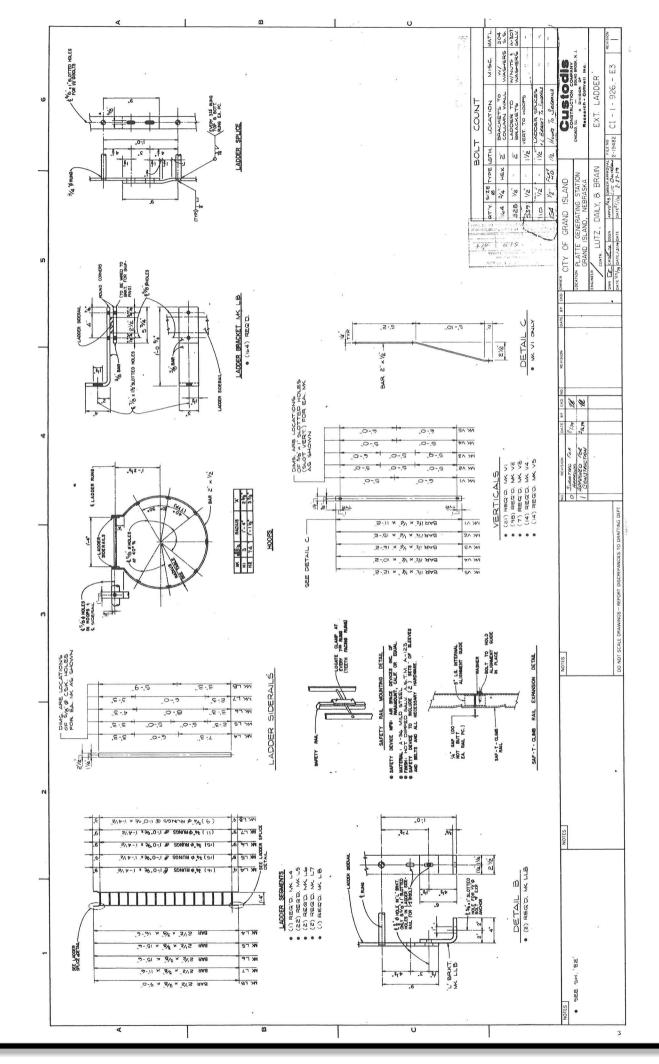
#### **6. CERTIFICATE OF INSURANCE**

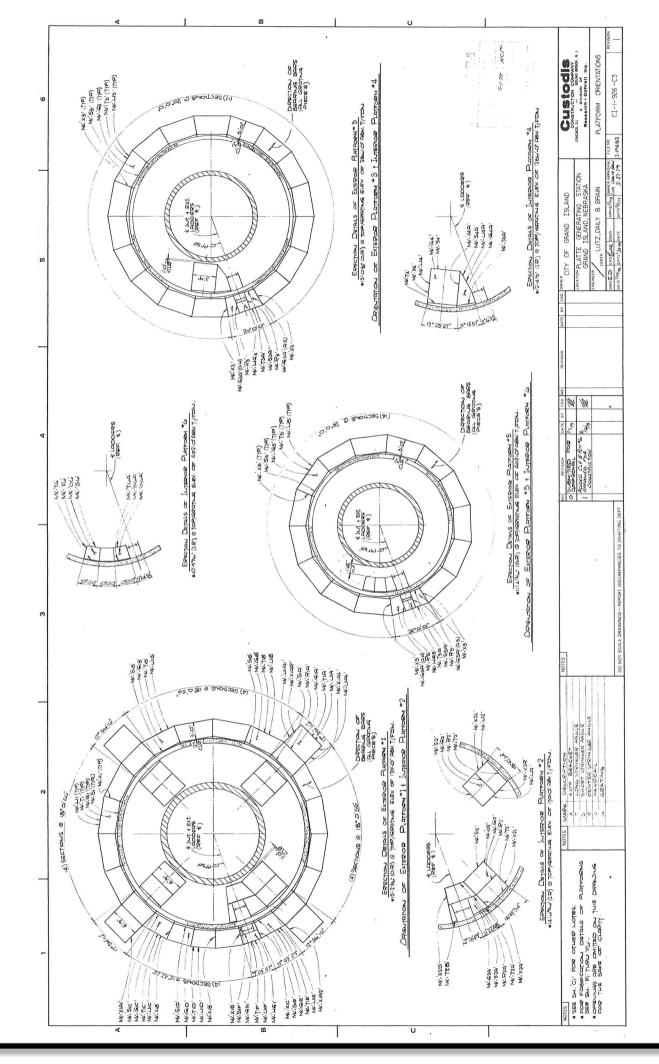
Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty (30) days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.

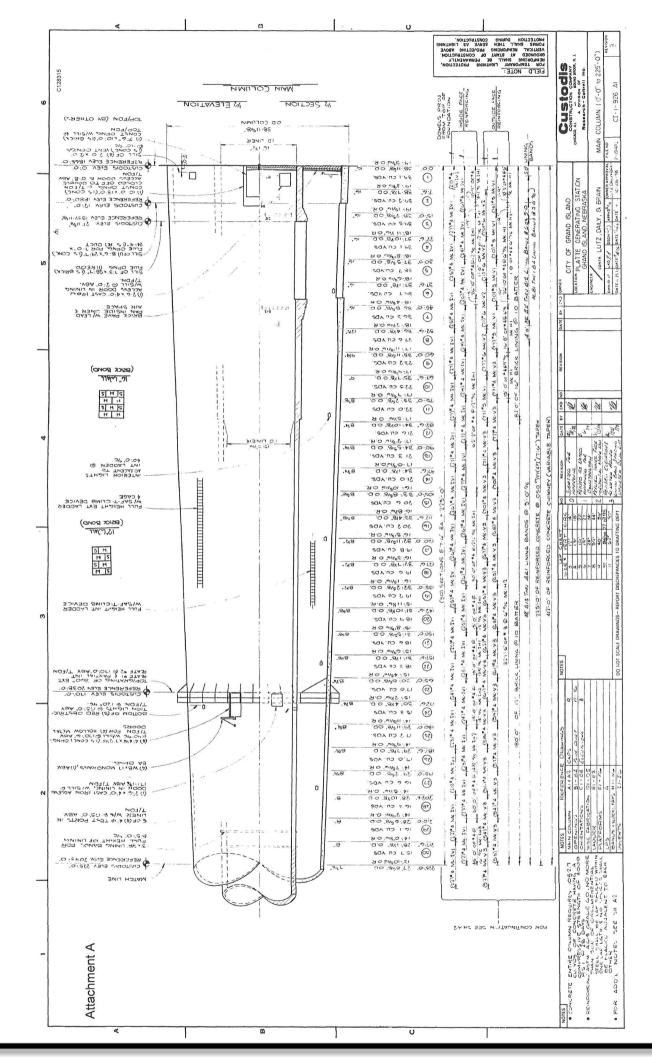












Ashland Performance Materials



#### HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

HETRON FR992 resin is a low viscosity, unpromoted, flame retardant<sup>(1)</sup> patented epoxy vinyl ester with F-Cat technology. This patented technology results in a resin that exhibits no foaming, excellent exotherm control, and industry-leading storage stability. Laminates made with HETRON FR992 resin have achieved a flame spread of <25 (ASTM E-84) when 3% antimony trioxide is added and a flame spread of <75 without antimony trioxide. HETRON FR992 resin gives final products with:

- Excellent flame retardancy
- High strength characteristics
- Excellent impact strength and toughness
- Fast wet-out and low drainage
- Excellent corrosion resistance to acidic and alkaline environments

# APPLICATIONS AND USE

HETRON FR992 resin can be used for corrosion resistant, reinforced thermosetting plastic equipment including filament wound, hand lay-up and spray-up tanks, pipes, ducts, stacks, scrubbers, linings or other equipment handling corrosive gases, vapors or liquids where a high degree of flame retardancy is required.

HETRON 922 resin is a non-flame retardant epoxy vinyl ester. HETRON FR992Sb resin can be used to achieve <25 flame spread without mixing additional antimony. HETRON FR998/35 resin can be used to fabricate laminates with improved corrosion resistance. Conditions for these resins are outlined in Ashland's Resin Selection Guide at www.hetron.com. For recommendations on specific services and environments, please contact us at hetron@ashland.com.

# TYPICAL LIQUID RESIN PROPERTIES

Property <sup>(2)</sup> at 25°C (77°F)	Value	Unit
Viscosity, Brookfield # 2 spindle @ 30 rpm	425	mPas (cps)
Percent Solids	57.5	%
Color	<5	Gardner
Specific Gravity	1.16	gm/cc

(1) HETRON polyester resin will burn if provided with a sufficient amount of heat and oxygen. The degree of flame retardancy of the cured polyeter resin is characterized by the ASTM E-84 tunnel test. This test is performed under strictly controlled conditions where a flame spread rating is assigned according to comparisons with test set-point materials. The behavior of the cured composite under these controlled conditions can vary from an actual fire situation.

(2) Properties are typical values based on material tested in our laboratories. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.



Ashland is committed to the continuous evolution of technology and service solutions that promote health, safety and environmental protection around the world.

\* Registered service mark of the American Chemistry Council. ® Registered trademark and ™ trademark of Ashland Inc



Ashland Performance Materials



# HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

TYPICAL CURING CHARACTERISTICS

SPI Gel Time at 82°C (180°F) Bath	Value	Unit
Gel Time, 2% Luperco <sup>(2)</sup> ATC Paste	17	minutes
Total Time	23	minutes
Peak Exotherm	193 (380)	°C(°F)

MEKP Cure System

Typical geltimes at different temperatures using different pre-acceleration systems and curing with Delta<sup>(3)</sup> X-9, Lupersol<sup>(3)</sup> DDM-9 and Hi-Point<sup>(4)</sup> 90 catalysts<sup>(5)</sup>.

CAUTION: Thoroughly mix promoters with resin before adding catalyst.

Temperature / Catalyst	DMA	Co-nap6%	Delta X-9	DDM-9	HiPoint 90	HiPoint 90/CHP 50/50
18°C (65°F) / 1.25 phr	0.1 phr	0.2 phr	15 minutes	27 minutes	25 minutes	60 minutes
	0.075 phr	0.2 phr	20 minutes	30 minutes	30 minutes	70 minutes
	0.05 phr	0.2 phr	25 minutes	40 minutes	33 minutes	75 minutes
25°C (77°F) / 1.25 phr	0.04 phr	0.3 phr	10 minutes	12 minutes	13 minutes	27 minutes
	0.04 phr	0.2 phr	15 minutes	20 minutes	20 minutes	40 minutes
	0.04 phr	0.1 phr	30 minutes	40 minutes	36 minutes	74 minutes
29°C (85°F) / 1.25 phr	0.05 phr	0.3 phr	8 minutes	8 minutes	8 minutes	18 minutes
	0.05 phr	0.2 phr	10 minutes	12 minutes	12 minutes	24 minutes





Ashland Performance Materials



# HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

0.05 phr	0.1 phr	20	25	24	50
		minutes	minutes	minutes	minutes

BPO / DMA Cure System

Temperature / BPO Paste 50%	DMA	Gel Time
18°C (65°F) / 2.0 phr	0.3 phr	26 minutes
	0.2 phr	36 minutes
	0.1 phr	70 minutes
24°C (75°F) / 2.0 phr	0.3 phr	16 minutes
24 0 (70 1) 7 2.0 pm	0.2 phr	24 minutes
	0.1 phr	50 minutes
29°C (85°F) / 2.0 phr	0.3 phr	11 minutes
	0.2 phr	16 minutes
	0.1 phr	27 minutes

- (3) Registered trademark of Atofina Chemicals Inc.
- (4) Registered trademark of Witco Chemical Corporation.
- (5) All levels are based on parts per hundred resin (phr)

Effect of Copper Naphthenate

Copper Naphthenate<sup>(6)</sup> (Cu-nap 8%) will influence gel time, gel-to-peak and peak exotherm at different temperatures and pre-accelerations. Catalyst used is Delta X-9 at 1.25 phr.

CAUTION: Thoroughly mix promoters with resin before adding catalyst.

Temperature / Cu-nap 8%	Co-nap6%	DMA	Gel Time	Gel-Peak	Peak Exo
18°C (65°F) / 0 phr	0.3 phr	0.05 phr	11 minutes	10 minutes	166°C (330°F)
18°C (65°F) / 0.04 phr	0.3 phr	0.05 phr	11 minutes	15 minutes	116°C (240°F)
25°C (77°F) / 0 phr	0.1 phr	0.04 phr	26 minutes	12 minutes	168°C (335°F)
25°C (77°F) / 0.04 phr	0.1 phr	0.04 phr	22 minutes	17 minutes	129°C (265°F)



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Ashland Performance Materials



# HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

29°C (85°F) / 0 phr	0.1 phr	0.03 phr	19 minutes	12 minutes	168°C (335°F)
29°C (85°F) / 0.04 phr	0.1 phr	0.03 phr	20 minutes	20 minutes	127°C (260°F)
35°C (95°F) / 0 phr	0.1 phr	0.02 phr	19 minutes	12 minutes	166°C
35°C (95°F) / 0.04 phr	0.1 phr	0.02 phr	20 minutes	26 minutes	(330°F) 121°C
					(250°F)

Exotherm control formulations - When laminates require a lower exotherm, copper<sup>(7)</sup> may be incorporated to achieve the desired reduction. High hydrogen peroxide catalysts, such as CADOX<sup>(8)</sup> M-50 or DELTA X-9, should be used to avoid dramatic moves in gel times.

- (6) Can be acquired by Akcros Chemical, Inc., Huls America Inc., or O.M. Group Inc.
- (7) More than 500 ppm of 8% copper may be detrimental to cure
- (8) Registered trademark of Akzo Nobel

Effects of Copper Levels at 25°C (77°F) Copper Naphthenate (Cu-nap 8%) will influence Gel Time, Gel-to-Peak and Peak Exotherm at 25°C (77°F). Catalyst used is Delta X-9 at 1.25 phr.

CAUTION: Thoroughly mix promoters with resin before adding catalyst.

Cu-naphthenate 8%	DMA	Co-nap6%	Gel Time	Gel-Peak	Peak Exo
0 phr	0.04 phr	0.1 phr	23 minutes	10 minutes	171°C (340°F)
0.01 phr	0.04 phr	0.1 phr	20 minutes	10 minutes	160°C (320°F)
0.02 phr	0.04 phr	0.1 phr	20 minutes	14 minutes	154°C (310°F)
0.03 phr	0.04 phr	0.1 phr	21 minutes	16 minutes	143°C (290°F)
0.04 phr	0.04 phr	0.1 phr	21 minutes	16 minutes	132°C (270°F)

For all surfaces that will be exposed to air during fabrication (top-coating, lining, patching, exterior surfaces, etc.) the addition of 0.4% paraffin wax to the final resin layer is recommended. A waxed surface may interfere with secondary bonding adhesion.





Ashland Performance Materials



#### HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

Flame retardant vinyl ester resins do not demonstrate ultraviolet stability equivalent to non-halogenated vinyl ester resins. Ultraviolet stability may be improved by adding 1.0% CYASORB<sup>(9)</sup> UV-9 ultraviolet screener to the exterior exposed surfaces where aesthetic appearance is desired.

TYPICAL MECHANICAL PROPERTIES

Property <sup>(2)</sup> of cured casting <sup>(10)</sup> at 25°C (77°F)	Value (SI)	Value (US)	Method
Barcol Hardness	35	35	ASTM D2583
Tensile Strength	90 MPa	13,000 psi	ASTM D638
Tensile Modulus	3450 MPa	5.0 psi x 10 <sup>5</sup>	ASTM D638
Tensile Elongation at yield	4.6%	4.6%	ASTM D638
Tensile Elongation at break	5.0%	5.0%	ASTM D638
Flexural Strength	145 MPa	21,000 psi	ASTM D790
Flexural Modulus	3585 MPa	5.2 psi x 10 <sup>5</sup>	ASTM D790
Heat Distortion Temperature	108°C	227°F	ASTM D648

(9) Registered trademark of Cytec Industries

(10) Catalyzed with 1.0% BPO, cured two hours at 71°C (160°F), then one hour at 93°C (200°F), post-cured two hours at 138°C (280°F).

Physical properties of laminates at various thicknesses and temperatures. Curing formulation = 100 phr HETRON FR992, 0.30 phr 6% cobalt naphthenate, 0.05 phr DMA, 1.50 phr HI POINT 90, post cured 2 hours at 121°C (250°F). V=10 mil glass surfacing veil, M=450 g/m² (1.5 oz/ft²) chopped strand mat, R=800 gm/m² (24 oz/yd²) woven roving

Laminate thickness (mm)	Temp. (°C)	Ten Str (MPa)	Ten Mod (MPa)	Flex Str (MPa)	Flex Mod (MPa)
3.18 (V, 2M; 25% glass)	25	140	5590	88	7720
	93	140	4960	91	6960
	121	106	2760	52	3450
6.35 (V, 2M, 2(RM); 39% glass)	25	240	8340	137	12,760
	93	223	7170	165	9790
	121	86	4140	130	9030
12.7 (V, 4M, 4(RM); 43% glass)	25	181	7450	160	13,240





Ashland Performance Materials



# HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

	93	218	8340	150	15,580
	121	159	6760	131	6760
Laminate Thickness (in.)	Temp. (°F)	Ten Str (psi)	Ten Mod (psix10 <sup>5</sup> )	Flex Str (psi)	Flex Mod (psix1ੴ)
0.125 (V, 2M; 25% glass)	77	19.800	8.1	12,800	11.2
	200	20,200	7.2	13,200	10.1
	250	15,400	4.0	7500	5.0
0.25 (V, 2M, 2(RM); 39% glass)	77	35,000	12.1	19,900	18.5
	200	32,400	10.4	23,900	14.2
	250	12,500	6.0	18,900	13.1
0.50 (V, 4M, 4(RM); 43% glass)	77	26,200	10.8	23,200	19.2
	200	31,600	12.1	21,400	22.6
	250	23,100	9.8	19,000	9.8

TYPICAL FLAME RETARDANCY OF LAMINATES

Tested Material	Class	ASTM E-84 Flame Spread
HETRON FR992 resin laminate <sup>(11)</sup> with 3% antimony trioxide	I	<25
HETRON FR992 resin laminate <sup>(11)</sup> without antimony trioxide	II	<75
Cement Asbestos Board (control)	I	0
Red Oak (control)		100

(11) Properties are typical values based on material tested in our laboratories. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items. Laminate thickness = 3.18 mm (0.125 in.) with approximately 27% glass content





Ashland Performance Materials



# HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

Master	Batch	Guide
MIGGLO	Daton	Odiac

Cobalt Naphthenate 6% Quantity for:	55-Gal (230 kg, 507 lbs)	5-Gal (21 kg, 46 lbs)	
0.2%	15.1 fl.oz/449 cc	1.3 fl.oz/39 cc	
0.3%	22.8 fl.oz/673 cc	2.0 fl.oz/59 cc	
0.4%	31.3 fl.oz/926 cc	2.7 fl.oz/78 cc	
DMA Quantity for:	55-Gal (230 kg, 507 lbs)	5-Gal (21 kg, 46 lbs)	
0.05%	4.0 fl.oz/119 cc	0.36 fl.oz/10 cc	
0.10%	8.1 fl.oz/239 cc	0.73 fl.oz/21 cc	
0.15%	12.1 fl.oz/358 cc	1.10 fl.oz/32 cc	
Copper Naphthenate 8% Quantity for:	55-Gal (230 kg, 507 lbs)	5-Gal (21 kg, 46 lbs)	
0.02%	1.1 fl.oz/34 cc	0.10 fl.oz/3 cc	
0.03%	2.2 fl.oz/66 cc	2.2 fl.oz/66 cc 0.19 fl.oz/6 cc	
0.04%	3.4 fl.oz/100 cc	0.27 fl.oz/8 cc	
9% MEKP Quantity for:	0.95 liter (1 quart)	2kg (5 lbs)	
1.25%	0.39 fl.oz/11.5 cc	0.90 fl.oz/26.6 cc	

#### **CERTIFICATES AND APPROVALS**

The manufacturing, quality control and distribution of products, by Ashland Performance Materials, comply with one or more of the following programs or standards: Responsible Care, ISO 9001, ISO 14001 and OHSAS 18001.

STANDARD PACKAGE Non-Returnable Drum with Net Weight of 230 Kgs (507 Lbs) DOT Label Requirement: Flammable Liquid

COMMERCIAL WARRANTY

Six months from date of shipment, when stored in accordance with the conditions stated below.





Ashland Performance Materials



#### HETRON® FR 992 FR / CR Epoxy Vinyl Ester Resin

#### **STORAGE**

Drums - Store at temperatures below 25°C (77°F). Storage life decreases with increasing storage temperature. Avoid exposure to heat sources such as direct sunlight or steam pipes. To avoid contamination of product with water, do not store outdoors. Keep containers sealed to prevent moisture pick-up and monomer loss. Mild mixing is recommended after prolonged storage. Rotate stock.

Bulk - See Ashland's Bulk Storage and Handling Manual for Polyesters and Vinyl Esters. A copy of this may be obtained from Ashland Performance Materials at +1.614.790.3333 or 800.523.6963.

All other conditions being equal, higher storage temperatures will reduce product stability and lower storage temperatures will extend product stability.

#### Notice

All information presented herein is believed to be accurate and reliable, and is solely for the user's consideration, investigation and verification. The information is not to be taken as an express or implied representation or warranty for which Ashland assumes legal responsibility. Any warranties, including warranties of merchantability or non-infringement of intellectual property rights of third parties, are herewith expressly excluded.

Since the user's product formulations, specific use applications and conditions of use are beyond the control of Ashland, Ashland makes no warranty or representation regarding the results which may be obtained by the user. It shall be the responsibility of the user to determine the suitability of any of the products mentioned for the user's specific application.

Ashland requests that the user reads, understands and complies with the information contained herein and the current Material Safety Data Sheet.







# R and P Industrial Chimney Co., Inc. Major Projects Completed Within Past 3Years

Updated: 1/7/2020

#### 1. NRG Texas

W.A. Parish Station 2500 Y.U. Jones Rd

Thompsons, TX 77481 Contact: Jay Massie Phone: (281) 343-2228 Date: January 2017

Date: January 2017 Amount: \$293,622.00

Description: Install band security system and repair liner bands & buckstay

#### 2. City of Waco

200 Colcord Ave Waco, TX 76702

Contact: Vince Tobola Phone: (254) 750-8066 Date: February 2017 Amount: \$306,098.00

Description: Riverside Water Treatment Plant smoke stack repairs, concrete chimney

#### 3. Barton Brands of Kentucky

P.O. Box 788

Bardstown, KY 40004 Contact: Tom Barbour Phone: (502) 396-0715 Date: September 2017 Amount: \$169,855.00

Description: Exterior cleaning, coating, and repairs. Interior target liner repairs of concrete

chimney.

#### 4. Seminole Electric Company

890 Hwy 17 North Palatka, FL 32177 Contact: Tom Fowler Phone: (813) 739-1252

Date: December 2018 – August 2019

Amount: \$4,356,000.00

Description: Replacement of stack roof plate and support structure under roof.



5. Eastman Chemical Co.

Kingsport, TN

Contact: Mary Culbertson Phone: (423) 229-3592 Date: September 2019 Amount: \$88,574.00

Description: Ash silo Repairs.



R AND P INDUSTRIAL CHIMNEY CO., INC. 244 INDUSTRY PARKWAY NICHOLASVILLE, KY 40356 859.887.2265 859.887.1459 (FAX) Website - www.randpchimney.com

# **Exceptions**

- 1. Coating to be used by R and P Industrial Chimney: Tnemec Chembuild Series 135
- 2. 110 V/30 amp breaker provided by owner.
- 3. Potable water to be at or near base of chimney, provided by owner

INDUSTRIAL CHIMNEY AND STACK CONSTRUCTION SINCE 1972

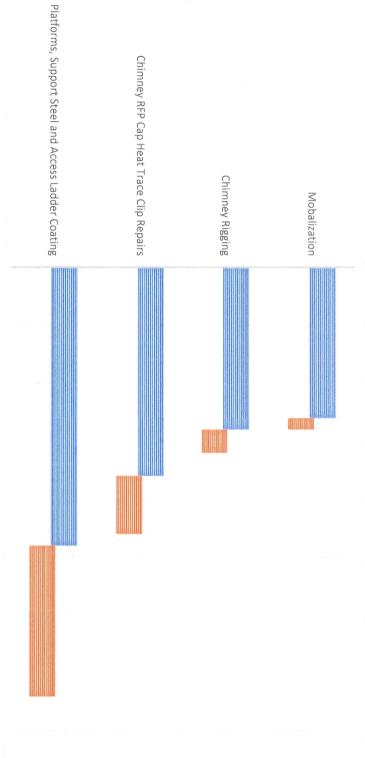
# Tentative Work Schedule **Chimney Repairs**

# **Platte Generating Station**



TASK NAME	START DATE	<b>DUE DATE</b>	DURATION
Mobalization	22-Apr-20	23-Apr-20	Ъ
Chimney Rigging	23-Apr-20	25-Apr-20	2
Chimney RFP Cap Heat Trace Clip			
Repairs	27-Apr-20	2-May-20	5
Platforms, Support Steel and			
Access Ladder Coating	3-May-20	16-May-20	13
Unrig and Demobalization	18-May-20	19-May-20	Þ

9-Apr-20 14-Apr-20 19-Apr-20 24-Apr-20 29-Apr-20 4-May-20 9-May-20 14-May-20 19-May-20



Contract #2020-

Issued: January 28, 2020

#### **CONTRACT AGREEMENT**

THIS AGREEMENT made and entered into by and between **R AND P INDUSTRIAL CHIMNEY CO., INC.**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

#### WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *CHIMNEY REPAIRS 2020*; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

<u>ARTICLE I</u>. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

- 1. This Contract Agreement.
- 2. City of Grand Island's Specification for this project.
- 3. R and P Industrial Chimney Co., Inc.'s bid signed and dated January 7, 2020.

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **One Hundred Sixteen Thousand Three Hundred Fifty and no/100 Dollars (\$116,350.00** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

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The total cost of the Contract includes:

Base Bid: Materials\$ 3,500.00

Labor <u>112,850.00</u>
Total \$ 116,350.00

#### Contractor Tax Option

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the CHIMNEY REPAIRS 2020.

<u>ARTICLE V</u>. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Platte Generating Station, and complete the work on or before *May 5, 2020*.

ARTICLE VI. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this Contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter,

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pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

R AND P INDUSTRIAL CHIMNEY CO., INC.	
By	Date
Title	
CITY OF GRAND ISLAND, NEBRASKA	
By	Date
Attest:City Clerk	
The Contract is in due form according to law and h	ereby approved.
	Date
Attorney for the City	

#### RESOLUTION 2020-20

WHEREAS, the City of Grand Island invited sealed bids for Chimney Repairs – 2020 at Platte Generating Station, according to plans and specifications on file with the Utilities Department; and

WHEREAS, on January 9, 2020, bids were received, opened and reviewed; and

WHEREAS, R & P Industrial Chimney Company of Nicholasville, Kentucky, submitted a bid in accordance with the terms of the advertisement of bids and plans and specifications and all other statutory requirements contained therein, such bid being in the amount of \$116,350.00; and

WHEREAS, the bid of R & P Industrial Chimney Company is less than the estimate for Chimney Repairs – 2020 at Platte Generating Station.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of R & P Industrial Chimney Company in the amount of \$116,350.00 for Chimney Repairs – 2020 at Platte Generating Station, is hereby approved as the lowest responsible bid.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 28, 2020.		
	Roger G. Steele, Mayor	
Attest:		
RaNae Edwards, City Clerk		

Approved as to Form  $\begin{tabular}{ll} $\tt x$ \\ January 24, 2020 & $\tt x$ City Attorney \\ \end{tabular}$