



DETRICK PYROSCAT*
For Fireproofing Structural Steel

Detrick Pyroscat is a special formulation of high-temperature aggregates, asbestos fibers, hydraulic binder and other materials. These ingredients are factory-blended to a uniform dry mixture that is ready for application after mixing with water at the job site. Pyroscat is adapted to application by spraying, casting and trowelling techniques, depending on job conditions.

USES:

Pyroscat provides a lightweight, fire-retardent protective treatment for structural steel columns, beams, tower skirts, LP gas tanks, and other exposed applications in refineries and chemical plants. Pyroscat sets up to a hard, durable sheath capable of withstanding for hours the 2000 F flame temperatures and high-pressure water streams commonly encountered in industrial fires.

RECOMMENDED THICKNESSES:

Fire-retardent materials are customarily rated in Hours, based on a given thickness used and on the method of application. For example, fire ratings for steel columns represent the number of hours required for heat from a "standard fire" to penetrate the protective treatment as applied, and to increase the steel column temperature to a critical level (1200 F). The thermal conductivity and heat capacity of a material are of some importance in an ASTM Fire Test. But the ability of the complete treatment to withstand thermal shock without destruction is one of the most significant factors in determining practical fire ratings in industrial installations.

The Pyroscat thicknesses recommended below were determined by physical tests on a series of sprayed, cast and trowelled applications. Tests included direct exposure to 100 psi hose pressure, both before and after subjecting the Pyroscat treatment to severe flame conditions.

<u>Thickness of Pyroscat</u>	<u>Approx. Fire Resistance Rating</u>
1"	2 Hours
1-3/4"	3 Hours - (UL-R-3960)
2"	4 Hours

ADVANTAGES OF DETRICK PYROSCAT:

CWH 000006482

Safer While Fighting Fires.... Many concrete aggregates and common bricks used for fireproofing purposes will spall and shatter when they are heated and subjected to a hose stream. Pyroscat remains virtually unaffected after direct flame exposure and saturation with a 100 psi hose stream.

*Trademark of the M. H. Detrick Company

**ADVANTAGES OF
DETRICK PYROSCAT
(CONTINUED):**

Lighter Weight.....Pyroscat weighs less than 55 lbs./cu. ft. in place, compared to approximately 150 lbs./cu. ft. for conventional concrete fireproofing. Excess dead weight is eliminated. As usually sprayed or trowelled in a protective sheath, Pyroscat weighs about 1/10 as much as formed concrete - at equivalent thickness per running foot.

Easier to Apply.....Detrick Pyroscat is specially formulated to permit installation by spray, trowel and casting techniques, depending on local job conditions. No other fireproofing material is as versatile from an application standpoint. Employs conventional supporting materials and placement. Only the one fireproofing material is required - no need for subsequent finishing layers nor heavy mastic coatings.

Durable and Weather-Resistant.....Pyroscat develops great strength from its selected high-temperature aggregates and hydraulic-setting binders. It withstands continued cycles of saturated freeze-and-thaw weathering tests.

SUMMARY OF PHYSICAL PROPERTIES:

Coverage (Trowelled).....	1.1 cu. ft./50 lb. bag
Material Required (Trowel Application).....	45 lbs. per cu. ft.
Air-Cured Weight (After Hydration and Drying) ..	54.5 lbs. per cu. ft.
Compressive Strength - Air-Cured.....	1650 psi
Compressive Strength After Firing at 1500 F....	520 psi
Lineal Shrinkage - Air-Cured.....	Less than 1%
Lineal Shrinkage After Firing at 1500 F.....	1.5%
Density After Firing at 1500 F.....	49.1 lbs. per cu. ft.
Fusion Temperature.....	2200 F
Thermal Conductivity (k) at 1000 F Mean Temp..	1.50 Btu
Setting Time.....	4 to 6 hours
Mixing Water:	
For Spray & Trowel Consistency	3-1/2 gal. water/50 lb. bag
For Casting Consistency.....	5 gal. water/50 lb. bag

Curing:

Pyroscat is a cementitious material and should be kept moist during the curing period of 72 hours or longer.

CWH 000006483

CONSTRUCTION CONTRACT

Place Westlake, Louisiana

Date August 2, 1972

1. It is hereby agreed between CONTINENTAL OIL COMPANY, a Delaware Corporation (herein called "Company") and

Fuller-Austin Insulation Company

of Lake Charles, Louisiana

(herein called "Contractor")

that Contractor will, as an independent contractor, construct and complete with reasonable diligence and dispatch; and furnish

and pay for all material, labor, tools, equipment, utilities, and other facilities to construct and complete fireproofing

of structures and pipe supports, VCM Plant, Lake Charles, Louisiana

in conformity with terms hereof and the following contract documents which are incorporated by reference and made a part

hereof and are listed as follows: The company's Basis of Bids dated May 1, 1972 and the company's

pre-bid letter dated June 1, 1972, and the contractor's proposal dated June 23, 1972.

for the sum of Thirty-four thousand six hundred two and no/100

Dollars (\$ 34,602.00).

2. Said work to be commenced not later than August 15, 1972, and completed not later than

October 15, 1972.

3. Payment shall be made as follows: 65 % of the work completed each month upon presentation of invoices in quadruplicate and upon approval of the invoices by Company, until 85 % of the contract price has been paid. Final payment shall be made promptly upon completion of the work and its acceptance by Company and when Contractor furnishes proof satisfactory to Company that all bills for material and labor covering said work have been fully paid by Contractor, and that the premises upon which the work is done and the structure built, improved or added to are not subject to any material or labor liens or claims of liens. Contractor and/or any subcontractor shall promptly and satisfactorily settle all claims for labor performed and equipment and supplies or materials furnished in connection with such work; and in the event Contractor fails or re-

and insuring the satisfactory completion of the work to be performed under this contract. Company shall have the right to check on the amount, quality, acceptability and fitness of the work and materials and shall decide questions as to the fulfillment of the work to be done by Contractor. The routine inspection of or failure to inspect any portion of the work shall not constitute approval or Final Acceptance on the part of Company.

17. Contractor shall use care in the use of the premises, observe local and plant safety rules, protect the materials, keep the premises clean and confine his operations to Company property unless otherwise specified.

18. Company, without invalidating the contract or any bond given thereon, may order extra work or make changes by altering, adding to, or deducting from the work, the contract sum being adjusted accordingly. Contractor will be furnished a written change order on each such change, and no change, alteration, or deviation shall be made, and no claim for extra cost or deduction shall be valid unless supported by a written change order.

19. Contractor shall be responsible for protecting finished work, equipment, supplies and materials, whether furnished by Company or Contractor, from loss, injury and/or damage from any cause whatsoever, until Final Acceptance of the work to be performed hereunder.

20. Company reserves the right to let contracts for other work in connection with the project, and Contractor shall coordinate his work and cooperate with the other contractors on the job.

21. Any delays in performance by either party under this contract shall be excused if and to the extent caused by occurrences beyond the control of the parties affected, including but not limited to decrees of the government, acts of God, strikes or other concerted acts of workmen, fires, floods, explosion, riots, war, rebellion and sabotage, but the foregoing shall not be considered a waiver by either party of the obligations of this contract.

22. Contractor shall not assign this contract or sublet it in part or as a whole without written consent of Company.

23. Bond is required in this contract. If Bond is required, Contractor shall qualify for a performance and payment bond in the full amount of the contract in a form and with a corporate surety selected by Company. The bond premium shall not be included in the contract price but will be paid by Company to the surety.

24. If this is other than a lump sum contract, Contractor certifies that the labor charges under this contract shall not include any remuneration (including back pay and penalties) paid to employees of Contractor by reason of any order, decision, or adjudication of any federal or state agency or court (including any settlement or compromise thereof) as the result of any violation of any federal or state law, rule or regulation.

25. If this is a lump sum contract, Contractor shall show on his final invoice the amount of all state and municipal sales and use tax paid by the Contractor and included in the contract price.

26. Contractor is and during performance hereof will continue to be registered as an employer under applicable federal and other laws, and Contractor's employer's registration numbers thereunder are:

Federal 74-1595229

State 31188

CONTINENTAL OIL COMPANY

BY *DD Rogers*
Plant Manager
(Title)

ATTEST:

Phyllis M. Welsch
Notary Public
(Title)

Contractor *Fulley Austin Insulation Co.*
BY *pmk*
VICE PRESIDENT
(Title)

FULLER-AUSTIN INSULATION CO.

June 23, 1972

Continental Oil Company
VCM Plant
P. O. Box 605
Westlake, La.

Attention: Mr. Larry N. West

Reference: Fireproofing

Gentlemen:

We are pleased to submit our proposal for furnishing labor and materials to fireproof columns and structural members in accordance with your bid request of May 16, 1972.

We propose to furnish and apply Pyroscat fireproofing in accordance with the following specifications. Beams and pipe rack supports will be encased on three sides with 3/4" highrib lath fastened in place with stainless steel bands or tie wire. We will apply 2" of Pyroscat in two applications troweled in place. Two corners of the three sided fireproofed items will be galvanized corner bead laced to the highrib lath. Exposed edges of the three-sided members will be caulked with caulking compound.

Columns will have all four sides fireproofed as described for the three-sided beams.

The bid on part of the job that you refer to in your May 16, 1972 letter was not a firm bid on Fuller-Austin's part. This was a budget figure that we quoted Jerry Brown on May 20, 1971.

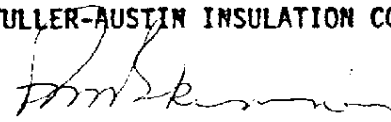
We are rebidding and you may consider these numbers firm.

Attached is your proposal form with each item priced independently.

Should you award us this contract, we will abide by your contract agreement.

Very truly yours,

FULLER-AUSTIN INSULATION CO.


R. M. Skinner

CWH 000006486

RMS:rp
Encls.

PROPOSAL

TO CONTINENTAL OIL COMPANY

Date June 23, 1972

Attention: Mr. Larry N. West
Continental VCM Plant
P.O. Box 605
Westlake, Louisiana

Dear Sir:

Having carefully examined the Instructions to Bidders, all conditions of Contract form 4-13-1'B and the Basis of Bids for

fireproofing of structures and pipe supports, VCM Plant, Lake Charles, Louisiana dated May 1, 1972.

as well as the premises and the conditions affecting the work, the undersigned proposes to furnish all necessary materials, labor, equipment, tools, transportation, services, etc., for completion of the work in accordance with above documents for the sum of:

Thirty Four Thousand Six Hundred Two and 00/100 ----- DOLLARS
(\$ 34,602.00)

If notified of the acceptance of this proposal within Thirty (30) days of the time set for receiving the bids, the undersigned agrees to execute a contract on the accompanying contract forms and the conditions thereof.

The estimated number of calendar days to complete this project is XXXXXXXX days.

The undersigned is registered as a federal and state employer, with employer's registration numbers as follows:

Federal 74-1595229

State 31188

Very truly yours,

MAILING ADDRESS:

P. O. Box 323
Lake Charles, La.

Title: Vice President

Company Fuller-Austin Insulation Co.

~~Corporation~~
(Designate as Corporation, Partnership or Individual)

ALTERNATES

X3Y7X7X7

A. Green - Top Deck Oxy Structure	15,052.00
-----------------------------------	-----------

B. Yellow - Block 1 Pine Rack	
Horizontals	7,980.00

XXXXXXXXXX

C. Red - Vinyl Columns Condenser	5,608.00
Structure	

XXXXXXXXXX

D. Blue - Vertical Pipe Rack Column	
East of control room	3,421.00

F. Brown - Fireproofing as indicated
on ISO Sketch in Block 11. 2,532.00

创建新函数

34,502.00

Unit Price per Square Foot 2" Thick

3 Sided Horz. Pipe Support @ 5.69/s.f.

4 Sided Vertical Supports @ 4.5P/s.f.

CWH 000006487

4942
REV. 3-1-64

12" steam iron - CCP

8-26-81 Ronnie Palermo - Fuller Austin

M.H. Detrick Co Insulation Div.

60 bags - pallet March, 7/ - Refining -

(Find out Concentration of Asbestos)

CWH 000006488

1972, ^{the} ~~company~~ removed asbestos

on June 8, 1972 all asbestos removed from Pyroscat

3% asbestos before above date in Pyroscat

above information from

CE Refractories

Vally Forge Pa

Mr. George Woods

215-337-1100

on 8-27-81

L. N. West

CONOCO

To

Date

M. H. Detrick (Insulation Div)

Coastal Storehouse
Houston

{ C.E. Refractory - Pyroscat 
713-467-3454
- Houston -
Ken Lewis

CWH 000006490