

BLOCK: 673 LOT: 8 QUALIFICATION CODE Brick Wall ADDRESS (SITE) 2791 Hooper Ave PERMIT NO. 04-09601



CONSTRUCTION PERMIT APPLICATION

C23. 08

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building			
2. Electrical			
3. Plumbing			
4. Fire Protection			
5. Elevator Devices			
6. Subtotal	\$		
7. Less 20% for State Plan Review			
8. Subtotal	\$		
9. State Permit Fee Surcharge			
10. Subtotal	\$		
11. Cert. of Occupancy			
12. Other			
13. TOTAL	\$		

I. IDENTIFICATION

1. Proposed Work Site at: Brick Wall 2791 Hooper Ave Brick NJ
2. Name of Owner in Fee: Peter Z. Trahanas Tel. [REDACTED]
Address 4 Manhattan Ave Rye NY 10580
street municipality zip code
3. Ownership in Fee: Public ☐ Private ☐
4. Principal Contractor: Don Siegel Const. Co Tel. (732) 785-1466
Address 565 Winding River Rd Brick NJ 08724
License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
Federal Employee No. 222 88 5787 FAX: (732) 785-2932
5. Architect or Engineer _____ Tel. (_____) _____
Address _____ Contact _____
6. Responsible Person in Charge once Work has Begun Don
Tel. (732) 904-5837 FAX: (732) 785-2932

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____
no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

Water Service

OPTIONAL (for office use only)

II. PROPOSED WORK	Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Re-viewer
1. ☐ Minor Work								
2. ☐ New Building								
3. ☐ Addition								
4. ☒ a. Repair								
☐ b. Alteration								
☐ c. Renovation								
☐ d. Reconstruction								
5. ☐ Fire Protection								
6. ☒ Plumbing								
7. ☐ Electrical								
8. ☐ Elevator Devices								
9. ☐ Asbestos Abat. Subch. 8								
10. ☐ Lead Hazard Abatement								
11. ☐ Demolition								
TOTAL COSTS								

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. State Specific Use: _____
2. Use Group: _____
3. Change in Use Group, Indicate Former: _____
4. No. of dwelling units: _____
Before Construction _____
After Construction _____
Net Gain or Loss _____

B. NON-RESIDENTIAL

1. State Specific Use: _____
2. Use Group: _____
3. Change in Use Group, Indicate Former: _____

III. DO YOU WANT: (optional)

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
 Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☒ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature

Peter Trahanas

Date

3/1/2004

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name

Address

Telephone ()

Signature

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

EXISTING WATER MAIN

NEW CONNECTION POINT OF 4" & NEW LINE

EXISTING 24" P.C. MAIN (WATER SERVICE

NEW 4" &
C-900
P.P.E.

UNION - CONNECTION MADE
OUTSIDE BLDG.

(17 TOTAL CONNECTIONS)

BLDG

CORP STOP

CORP STOP

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UDC NEW JERSEY
CONSTRUCTION
PERMITS

Date Issued 03/29/2004
Control #
Permit # 04-0961

IDENTIFICATION Block 603 Lot 8 Desc

Work Site Location 2791 HOOVER AVE-BRICK MALL
Contractor DOM SIEGEL CONST CO
Owner in Fee TRAHAMES, PETER
Address 4 MANHATTAN AVE
CITY OF NJ
Telephone
Lic. No. of Bldgs. Reg. No.
Federal Emp. No. 22-2885787

Is hereby granted permission to perform the following work:
[] BUILDING [] PLUMBING [] LEAD HAZARD ABATEMENT
[] ELECTRICAL [] FIRE PROTECTION [] DEMOLITION
[] ELEVATOR DEVICES [] ASBESTOS ABATEMENT [] OTHER
(Subchapter 9 only)

DESCRIPTION OF WORK:
WATER SERVICE - ALL WORK OUTSIDE OF BUILDING FOR BRICK MALL
RECONNECTION OF SERVICES TO NEW 4" LINE
NEW 4" FEED LINE OFF OF EXISTING 2" SERVICE LINE

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$ 3,000
Construction Official
03/29/2004

U.C.C. F170 (rev. 3/96) NJ UCCARS 5.24E

PAYMENTS (Office Use Only)

Building 0
Electrical 0
Plumbing 255
Fire Protection 0
Elevator Devices 0
Other 0
DCA State Permit Fee 4
Cert. of Occupancy 0
Total 259
Check No. 2535
Cash
Collected By MNR

03/29/04 11:21AM 000000#7876
**02 SERV.002
#0961
PLUMBING
DCA
CHECK \$259.00

UCCARS 5.24E
TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
PLUMBING
SUBCODE
TECHNICAL SECTION

Date Received 03/22/2004
Date Issued 3/29/04
Control # C23-08
Permit # 04-0961

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING
CONTRACTORS. NOTIFY THIS OFFICE: CALL UTILITY DIG. NO: 1-800-272-1000

D. TECHNICAL SITE DATA (list all fixtures)

Block 673 lot 8 Qual
Work Site Location 2791 HOPPER AVE-BRICK MALL

WATER SERVICE

NO.

FEE (Office Use Only)

Owner in Fee IRAMAHAS, PETER

Fixture/Equipment
Water Closet 0
Urinal / Bidet 0
Bath Tub 0
Lavatory 0
Shower 0
Floor Drain 0
Sink 0
Dishwasher 0
Drinking Fountain 0
Washing Machine 0
Hose Bib 0
Water Heater 0
Fuel Oil Piping 0
Gas Piping 0
Steam Boiler 0
Hot Water Boiler 0
Sewer Pump 0
Interceptor / Separator 0
Backflow Preventer 0
Greasetrap 0
Sewer Connection 0
Water Service Connection 255
Stacks 0
Other 0
Other 0

Address 4 MANHATTAN AVE

RYE, NY 10580-

Tel. [REDACTED]

Contractor DON SIEGEL CONST CO

Address 565 WINDING RIVER RD

BRICK, NJ 08724-

Tele. (732) 785-1466

Lic. No. or Bldgs. Reg. No.

Federal Emp. No. 22-2885787

B. PLUMBING CHARACTERISTICS

Use Group Present U Proposed U

Building Sewer Size [] Public Sewer [] Private Septic

Water Sewer Size [] Public Water [] Private Well

Estimated Cost of Plumbing Work \$ 3,000

JOB SUMMARY (Office Use Only)

PLAN REVIEW

[] No Plans Required

Joint Plan Review Required:

[] Bldg [] Elect

[] Fire [] Elevator

[] Plumbing Plans Approved

Date: 3/23/04

Approved By: [Signature]

SUBCODE APPROVAL

[] CO [] CC [] CA

Approved By: [Signature]

Date: 3/23/04

TCO

INSPECTIONS

Type Failure-Failure Approval Initial

Slab 17

Rough 0

Water 0

Sewer 0

Fixtures 0

Gas Equip. 0

Gas Piping 0

Solar 0

TCO 0

0

0

0

0

0

0

0

0

0

Signature/Contractor Seal
[] Licensed Plumbing Contractor [] Exempt Applicant

U.C.C. F130 (rev. 3/96)

Paid [] Check \$
Collected by: DCA State Permit Fee \$ 4

Administrative Surcharge \$ 0
Minimum Fee \$ 0
TOTAL FEE \$ 255

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
PLUMBING
SUBCODE
TECHNICAL SECTION

Date Received 03/22/2004
Date Issued 3/24/04
Control # C23-08
Permit # 04-0961

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING... D. TECHNICAL SITE DATA (list all fixtures.)

Block 673 Lot 8 Sublot

Work Site Location 2791 MOOPER AVE-BRICK MALL

WATER SERVICE

Owner in fee TRAHANS, PETER

Address 4 MANHATTAN AVE

Tele. [REDACTED]

Contractor DON STEEL CONST CO

Address 565 MINDING RIVER RD

BRICK, NJ 08724-

Tele. (332) 785-1466

Lic. No. or Bldg. Reg. No.

Federal Emp. No. 22-2885787

8. PLUMBING CHARACTERISTICS

Use Group Present U Proposed U
Building Sewer Size [] Public Sewer [] Private Septic
Water Sewer Size [] Public Water [] Private Well
Estimated Cost of Plumbing Work \$ 3,000

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☒ No Plans Required

Joint Plan Review Required:

[] Bldg [] Elect
[] Fire [] Elevator

[] Plumb Plans Approved

Date: 3/25/04

Approved by: [Signature]

SUBCODE APPROVAL

[] CO [] CCO [] CA

Approved by: TCO

Date: []

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature/Contractor Seal

[] Licensed Plumbing Contractor [] Exempt Applicant

NO.

FIXTURE/EQUIPMENT

FEE (Office Use Only)

0	Water Closet	0
0	Urinal / Bidet	0
0	Bath Tub	0
0	Lavatory	0
0	Shower	0
0	Floor Drain	0
0	Sink	0
0	Dishwasher	0
0	Drinking Fountain	0
0	Washing Machine	0
0	Hose Bib	0
0	Water Heater	0
0	Fuel Oil Piping	0
0	Gas Piping	0
0	Steam Boiler	0
0	Hot Water Boiler	0
0	Sewer Pump	0
0	Interceptor / Separator	0
0	Backflow Preventer	0
0	Greasetrapp	0
0	Sewer Connection	0
0	Water Service Connection	255
17	Stacks	0
0	Other	0
0	Other	0

Paid [] Check #
Collected by: Administrative Surcharge \$ 0
Minimum Fee \$ 0
TOTAL FEE \$ 255
DCA State Permit Fee \$ 4

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD.
DIVISION OF INSPECTIONS

UCC NEW JERSEY
PLUMBING
SUBCODE
TECHNICAL SECTION

Date Received 03/22/2004
Date Issued 3/19/04
Control # C23-08
Permit # 04-0961

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS. NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 673 Lot 8
Work Site Location 2791 HOOPER AVE-BRICK MALL

WATER SERVICE

Owner in Fee TRAHANAS, PETER
Address 4 MANHATTAN AVE
RVE NY 10580-
Tel [REDACTED]
Contractor DON SIEGEL CONST CO
Address 565 HINDING RIVER RD
BRICK, NJ 08724-
Tele (732) 785-1466
Lic. No. of Bldgs. Reg. No.
Federal Emp. No. 22-2885787

8. PLUMBING CHARACTERISTICS

Use Group Present U Proposed U
Building Sewer Size [] Public Sewer [] Private Septic
Water Sewer Size [] Public Water [] Private Well
Estimated Cost of Plumbing Work \$ 3,000

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☒ No Plans Required
Joint Plan Review Required:

☐ Bldg ☐ Elect
☐ Fire ☐ Elevator

☐ Plumbing Plans Approved
Date: 3/23/04

SUBCODE APPROVAL

☐ CO ☐ CCO ☐ CA
Approved By: [Signature]
Date: [REDACTED]

INSPECTIONS

Type	Failure	Dates (Month/Day)	Initial
Slab			
Rough			
Water			
Sewer			
Fixtures			
Gas Equip.			
Gas Piping			
Solar			
TCO			

D. TECHNICAL SITE DATA (List all fixtures.)

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
0	Water Closet	0
0	Urinal / Bidet	0
0	Bath Tub	0
0	Lavatory	0
0	Shower	0
0	Floor Drain	0
0	Sink	0
0	Dishwasher	0
0	Drinking Fountain	0
0	Washing Machine	0
0	Hose Bib	0
0	Water Heater	0
0	Fuel Oil Piping	0
0	Gas Piping	0
0	Steam Boiler	0
0	Hot Water Boiler	0
0	Sewer Pump	0
0	Interceptor / Separator	0
0	Backflow Preventer	0
0	Greasetrap	0
0	Sewer Connection	0
0	Water Service Connection	255
0	Stacks	0
0	Other	0
0	Other	0

Paid ☐ Check # [REDACTED] Administrative Surcharge 0
Collected by: [REDACTED] Minimum Fee 0
TOTAL FEE 255
DCA State Permit Fee \$ 4

C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature/Contractor Seal
☐ Licensed Plumbing Contractor ☐ Exempt Applicant

THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

1551 HIGHWAY 88 WEST BRICK, NEW JERSEY 08724 458-7000

WATER SERVICE PERMIT

Block: 673 Lot: 8
Brick Mall #

installing new water line
due to leaking piping.

Trahanas, Peter
4 Manhattan Ave
Rye, NY 10580-1825

ACCOUNT # 3985634 METER # _____ METER MFG. _____

SIZE OF SVC LINE 4" to 2" METER SIZE 1"

CONNECTION FEE \$ _____

INSPECTIONS

25.00

Date
1st

Insp.
2nd

Comment

Inspector

A. Service Line

B. Curb Connection

C. House Conn & Mtr

D. Cross-Connection

Inspector

Peter Trahanas
Homeowner/Applicant

O'DONNELL, STANTON & ASSOCIATES, Inc.**ENGINEERS • PLANNERS • SURVEYORS****1705 ROUTE 37 EAST, TOMS RIVER, NEW JERSEY 08753 (732) 573-0490 • FAX (732) 573-0499**James F. Stanton, PE, PP, CME
Michael F. O'Donnell, PE, PP, CMEMatthew Smith
John R. Berens, PEE-mail: osainc@comcast.net

Certificate of Authorization No. GA 276876

April 29, 2004

Donald Seigel
565 Winding River Road
Brick, New Jersey 08724Permit #
04-0961
04-26
073/8**Brick Mall / OSA #04067
Township of Brick
Four (4) Inch Diameter C900 Water Pipe
Thrust Block Design Calculations**

Dear Mr. Seigel:

Attached are two (2) copies of the thrust blocks design calculations for your Brick Mall water pipe, signed and sealed by New Jersey Professional Engineer. The calculations evaluate three (3) conditions: capped dead end, 45 degree bend and 22½° degree bend. The calculations are based upon the following conditions:

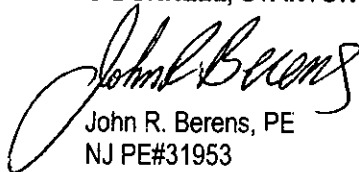
- Pipe diameter – 4"
- Pressure – 60 PSI
- Soil Boring Strength – 1000 psf (soft soils – trench)
- Factor of Safety – 1½

The calculations are for the minimum contact bearing area of the concrete thrust block with the earth (trench wall) in square feet. Larger bearing areas will only increase the thrust restraint, so you may construct thrust blocks with larger bearing areas if you want. Attached is a copy of a table of thrust block sizing used on construction plans as a typical detail. Thrust block sizing per the detail are slightly larger than the ones calculated for your specific project.

Please be advised that based on the design conditions presented herein, I certify that construction of the thrust blocks, in conformance with the design, will provide adequate restraint against longitudinal separation from unbalanced hydrostatic forces. Properly constructed thrust blocks will distribute the thrust forces in the pipe to the soil or trench wall in such a manner that joint separation will not occur. The thrust blocks will increase each fittings ability to resist movement by increasing the bearing area and transmitting the forces to the soil. The thrust block must be placed against undisturbed soil and the block must be perpendicular to the direction of the thrust.

Should you have any further questions, please do not hesitate to contact me.

Very truly yours,

O'DONNELL, STANTON & ASSOCIATES, Inc.
John R. Berens, PE
NJ PE#31953

JRB/gg

H:\Sues folder 6-17-02\miscellaneous\don siegel re brick mall.doc

Attachments

O'DONNELL, STANTON & ASSOCIATES, INC.

Engineers • Planners • Surveyors

1705 Route 37 East

Toms River, New Jersey 08753

(732) 573-0490 • Fax (732) 573-0499

PROJECT # Brick Mall - Don Seigel
SHEET NO. 1 OF 4
CALCULATED BY [Signature] DATE 4/28/04
CHECKED BY [Signature] DATE _____
SCALE _____

For Don Seigel (732) 904-5837 (cell)

THRUST BLOCK DESIGN CALCULATIONS

CRITERIA

Pipe Size = 4" ϕ

$A = 12.57 \text{ in}^2$

Pressure = 60 PSI

Bearing Strength Soil = 1000 psf - soft soils
(disturbed trench)

Legend

T = Force (lbs)

P = pressure (psi)

A = Area Pipe (in^2)

SB = Soil Bearing Strength (psf)

h = Thrust block height (ft)

b = Thrust block width (ft)

SF = factor of safety

$A_b = \text{Bearing Block Area} = h \times b \text{ (ft}^2\text{)}$

THRUST BLOCK DESIGN

$h \leq \frac{1}{2} \text{ depth} \geq \text{pipe diameter}$

area below pipe spring line - not to exceed 0.8 pipe OD

b = 1-2 times block height (typical)

SF = $1\frac{1}{2}$

THRUST BLOCK REQUIREMENTS

1. CAPPED DEAD END

2. 45° BEND

3. 22½° BEND

THRUST BLOCK DESIGN

DESIGN CALCULATIONS BY:

John R. Berens PE

NJPE # 31953

DATE: April 29, 2004

SIGNATURE

[Signature]

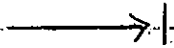
O'DONNELL, STANTON & ASSOCIATES, INC.

Engineers • Planners • Surveyors

1705 Route 37 East

Toms River, New Jersey 08753

(732) 573-0490 • Fax (732) 573-0499

PROJECT # Brick Mall - Don SeigelSHEET NO. 2OF 1CALCULATED BY JRSDATE 4/28/04CHECKED BY JRSDATE 4/28/04SCALE 1" = 1'-0"1.) DEAD END

$$T = PA$$

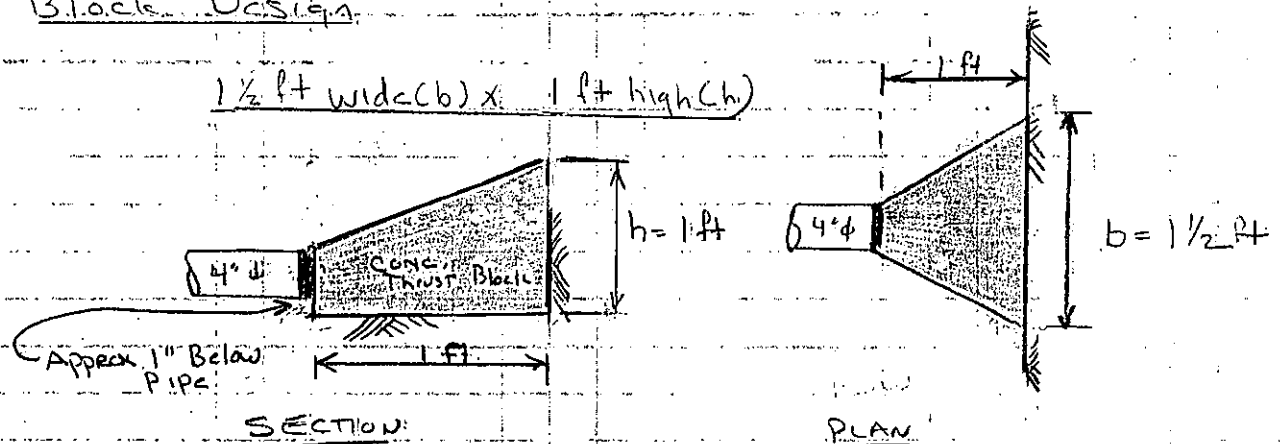
$$T = (60 \text{ psc}) (12.57 \text{ in}^2)$$

$$T = 754 \text{ lbs}$$

THRUST BLOCK

$$A_b = \frac{(h)(b)(S_c)}{S_B} = \frac{T(S_c)}{S_B} = \frac{754 \text{ lbs} (1 \frac{1}{2})}{1000 \text{ psf}}$$

$$A_b = 1.13 \text{ sf required}$$

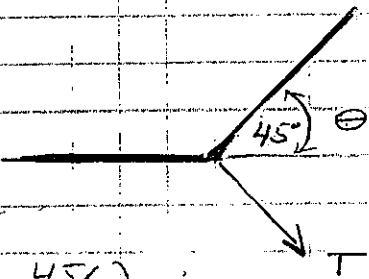
Block Design

2) 45° BEND

$$T = 2 PA (\sin \theta/2)$$

$$T = 2 (60 \text{ psi}) (12.57 \text{ in}^2) (\sin 45/2)$$

$$T = 577 \text{ lbs}$$



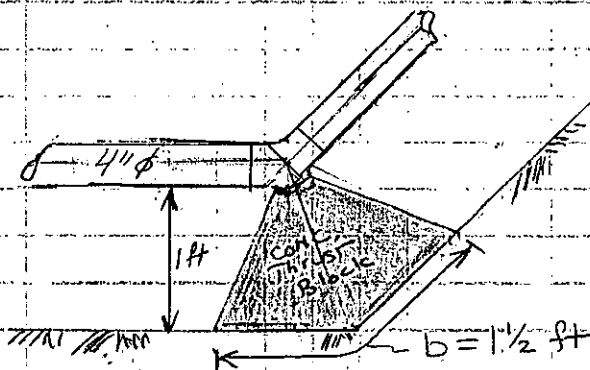
THRUST BLOCK

$$A_b = \frac{(h)(b)(S_c)}{S_B} = \frac{T(S_f)}{S_B} = \frac{577 \text{ lbs} (1\frac{1}{2})}{1000 \text{ psf}}$$

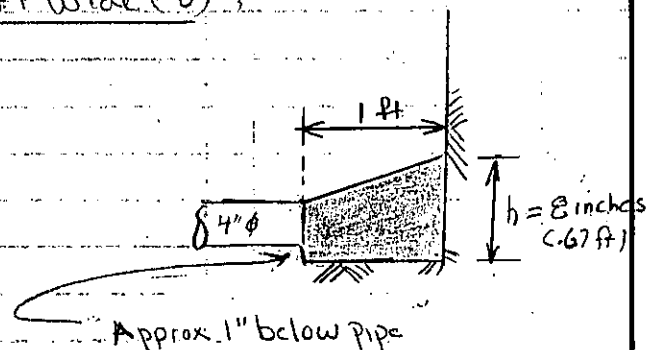
$$A_b = 0.87 \text{ sf required}$$

Block Design

0.67 ft (8") high (h) x 1 1/2 ft wide (b)



PLAN



SECTION

$$\text{Area of block} = L_B \times H_B = (T/\sigma) \quad (3.7)$$

where

$L_B \times H_B$ = area of bearing surface of thrust block (ft²)

T = thrust force (lb)

σ = safe bearing value for soil (lb/ft²)

If it is impractical to design the block for the thrust force to pass through the geometric center of the soil-bearing area, then the design should be evaluated for stability.

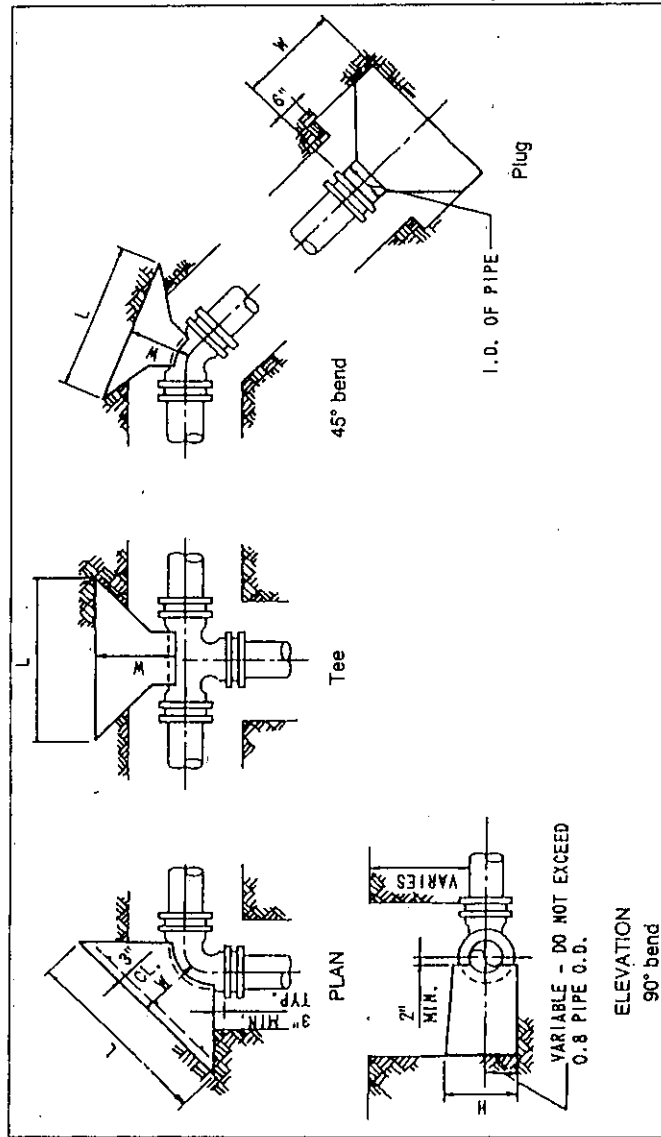
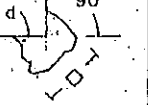
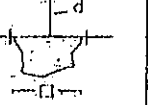
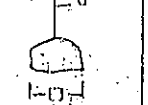


FIGURE 3.12 Typical thrust block details (Sanks, et al., 1989).

TABLE OF THRUST BLOCKS

□ = CONTACT BEARING AREA OF BLOCK WITH EARTH, SQUARE FEET

DIAMETER (d) OF PIPE	5'-22 1/2' ELBOW 	23'-45' ELBOW 	46'-90' ELBOW 	TEE CONNECTION 	45' WYE 	PLUG 
	□	□	□	□	□	□
4"	0.5	1.4	2.6	1.8	2.2	2.0
6"	1.5	3.0	6.0	4.0	4.5	4.5
8"	2.5	5.0	9.5	6.5	9.5	8.0
10"	4.1	8.0	13.0	9.5	12.5	12.5
12"	5.5	11.5	19.0	13.5	16.0	18.0
16"	9.0	18.0	33.0	23.0	27.0	32.0
20"	14.0	28.0	51.0	36.0	42.0	50.5

NOTES:

1. BEARING AREAS ARE BASED ON UNDISTURBED SOIL WITH A BEARING CAPACITY OF 1,000 POUNDS PER SQUARE FOOT; FOR A LESSER SOIL BEARING CAPACITY THESE AREAS SHALL BE INCREASED ACCORDINGLY.
2. ALL CONCRETE THRUST BLOCKS SHALL BE CLASS "B".
3. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
4. NO JOINT SHALL BE COVERED WITH CONCRETE.

Don Siegel Const. Co.
732-904-5837

THE ORIGINAL

Series 2000PV

MECHANICAL JOINT RESTRAINT GLAND
FOR USE WITH C-900 OR IPS OD PVC PIPE

The 2000PV mechanical joint restraint is the fastest and most economical method of restraining PVC pipe to mechanical joints. Now the need for costly concrete thrust blocks and corrodible steel tie rods is eliminated. It can be used in straight alignment or at the pre-set deflection joint recommended for the mechanical joint.

The 2000PV was the first PVC joint restraint to be tested to UNI-B-13, Underwriters Laboratories, and Factory Mutual.



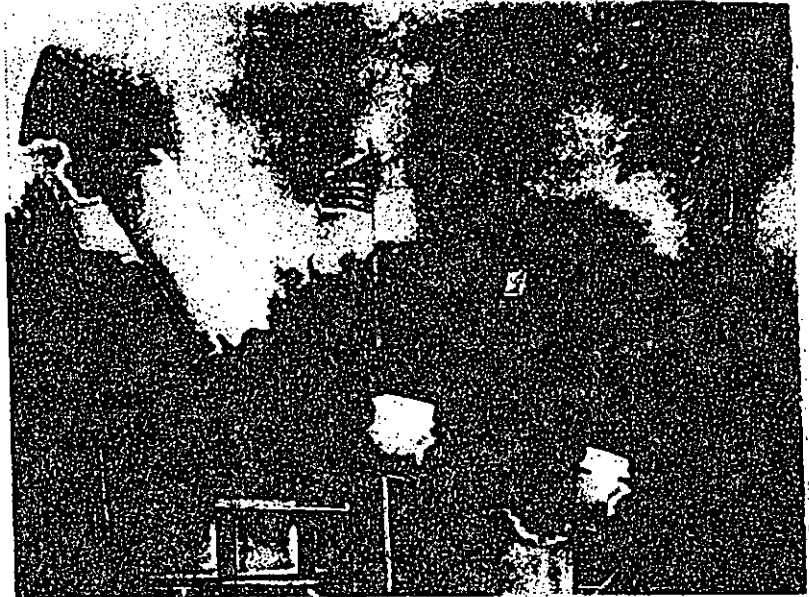
Tested to and meets the requirements of ASTM F 1674-96 "Standard Test Method for Joint Restraint Products for Use with PVC Pipe" through 24 inch size.



UL-listed in the four through twelve inch sizes for joining UL-listed ductile iron fittings to UL-listed, Class 150 PVC pressure pipe. The maximum allowable joint deflection is five degrees.



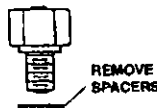
Factory Mutual approved for use on DR18 PVC pipe in four through twelve inch sizes.



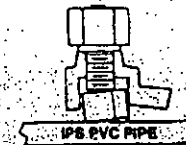
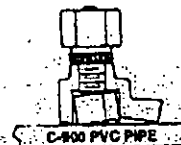
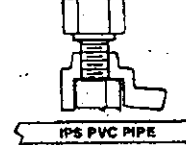
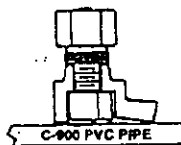
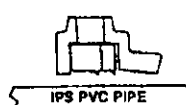
The fastest and most economical method of restraining PVC pipe to mechanical joints. Eliminates costly concrete thrust blocks and corrodible steel tie rods.

2000PV mechanical joint restraints can be used on both C-900 and IPS OD PVC pipe. A spacer is provided under each torque-limiting screw to accommodate the different diameters.

For installation on IPS PVC Pipe remove spacers and replace screws. Install per instructions. ►



For installation on C-900 PVC Pipe use as received and install per instructions. ▼



The pressure rating for the 2000PV joint restraint is the standardized pressure rating of the PVC pipe on which it is used.

2000PV joint restraints can be used on both C-900 and IPS OD PVC pipe, 3" through 12".

STANDARDIZED PRESSURE RATING

ANSI/AWWA C900 CI OD	SAFETY FACTOR	ASTM D2241 IPS OD	SAFETY FACTOR
DR 14 200 PSI	4 : 1	SDR 17 250 PSI	3 : 1*
DR 18 150 PSI	4 : 1	SDR 21 200 PSI	3 : 1*
DR 25 100 PSI	4 : 1	SDR 26 160 PSI	3 : 1*

*Full Pipe Capacity
(See "Three Testing Methods")

STANDARDIZED PRESSURE RATING

ANSI/AWWA C900 CI OD	ASTM D2241 IPS OD
DR 14 200 PSI	SDR 17 200 PSI
DR 18 150 PSI	SDR 21 160 PSI
DR 25 100 PSI	SDR 26 120 PSI

2000PV JOINT RESTRAINT FOR PVC PIPE

Sample Specifications

Mechanical joint restraint shall be incorporated into the design of the follower gland. The restraint mechanism shall consist of a plurality of individually-actuated gripping surfaces to maximize restraint capability. Glands shall be manufactured of ductile iron conforming to ASTM A536-80.

The gland shall be such that it can replace the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/A21.53 of latest version. Twist off nuts, sized same as tee-head bolts, shall be used to insure proper actuating of restraining devices.

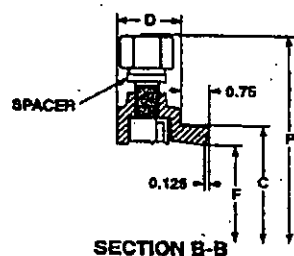
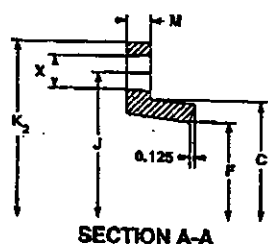
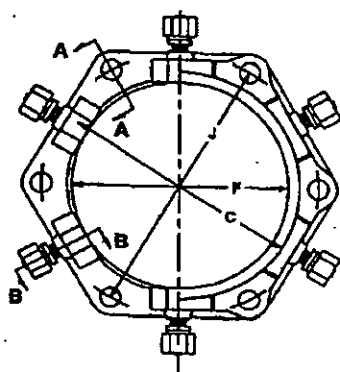
The restraining glands shall have a pressure rating equal to that of the pipe on which it is used. The restraining glands shall have been tested to ASTM F1674-96, be listed by Underwriters Laboratories, and be approved by Factory Mutual. The restraint shall be the EBAA Iron Series 2000PV or approved equal.

Patent Information

The products presented herein are covered by one or more of the following patents: 4627774, 4896903, 5071175.

Dimensional Data

SERIES	C	D	F	J	M	X	NO. OF WEDGES	NO. OF BOLTS	P	P WITH NUTS TWISTED OFF	K ₂	PIPE SIZE	SHIPPING WEIGHT	PVC PIPE OD	
														C100 AWWA C900	IPS ASTM D2241 D1785
2003PV	4.84	1.55	3.60	6.19	0.50	3/4	4	4	9.8	8.6	7.69	3	7.0	—	3.5
2004PV	5.92	1.68	4.90	7.50	0.50	7/8	4	4	10.5	9.5	9.13	4	8.8	4.8	4.5
2006PV	8.02	1.88	7.00	9.50	0.50	7/8	6	6	13.0	12.1	11.13	6	12.1	6.9	6.63
2008PV	10.17	1.88	9.15	11.75	0.62	7/8	6	6	14.5	13.6	13.38	8	16.3	9.05	8.63
2010PV	12.22	2.10	11.20	14.00	0.82	7/8	8	8	17.0	16.0	15.63	10	26.0	11.1	10.75
2012PV	14.32	2.10	13.30	16.25	0.75	7/8	8	8	19.0	18.1	17.88	12	31.4	13.2	12.75
2014PV	16.40	2.25	15.49	18.75	0.88	7/8	10	10	21.7	20.9	20.38	14	47.6	15.3	—
2016PV	18.50	2.25	17.58	21.00	0.88	7/8	12	12	23.8	23.0	22.63	16	52.8	17.4	—
2018PV	20.60	2.25	19.68	23.25	1.13	7/8	12	12	25.9	25.1	24.88	18	61.8	19.5	—
2020PV	22.70	2.25	21.79	25.50	1.25	7/8	14	14	28.0	27.2	27.13	20	70.9	21.6	—
2024PV	26.90	2.75	25.99	30.00	1.42	7/8	16	16	32.3	31.5	31.63	24	92.9	25.6	—
2030PV	33.29	2.70	32.22	36.88	1.50	1 1/8	20	20	38.5	37.7	39.12	30	126.5	32.0	—
2036PV	39.59	2.70	38.52	43.75	1.50	1 1/8	24	24	44.8	44.0	46.00	36	161.3	38.3	—



EBAA IRON™

EBAA IRON SALES, INC.

"Your connection to the future"™

P.O. BOX 857 EASTLAND, TEXAS 76448 USA

254 / 629 1731 800 / 433 1716 FAX 254 / 629 8931



Listings and Approvals

Sizes 4" through 12" are listed by Underwriters Laboratories, Inc., category H/KF "Fittings, Retainer Type," with a deflection angle of five degrees when used on UL-listed, Class 150 PVC pressure pipe and a UL-listed appurtenance. The listing number is EX2836.

Sizes 4" through 12" are approved by Factory Mutual for use on approved DR18 PVC pipe, and sizes 4" through 10" are approved for use on DR14 PVC pipe and mechanical joint appurtenances.

The 2000PV restraint exceeds all requirements of ASTM F1674-96.

Special Notes

EBAA-Seal™ gaskets are provided with the 30" and 36" 2000PV restraints to facilitate easier assembly of the mechanical joint, and are required on the above referenced sizes to obtain the pressure ratings and safety factors shown.

For test pressures above the rated pressures, consult the engineering department of EBAA Iron, Inc. for recommendations.

Township of Brick

Counter Form
(PLEASE PRINT)

Site Location: Brick Mall 2791 Hooper ave Brick NJ
Block: 673 Lot: 8
Owner's Name: Peter Trahanas
Owner's Mailing Address: 4 Manhattan ave Rye NY 10580
Phone: (914) 967-8957

BUILDING

Contractor: _____
Address: _____
Phone#: _____
Lis # _____
Federal Emp # or SSN _____

Technical Data

Description of Work: _____

Type of Work

☐ New Building ☐ Siding
☐ Addition ☐ Fence
☐ Alteration ☐ Pool
☐ Roofing ☐ Demolition
☐ Asbestos Abatement ☐ Sign _____ sq ft
☐ Fireplace wd/gas

Building Characteristics

Use Group Present: _____ Proposed: _____
No of Stories: _____
Height of Structure: _____
Area of the largest floor: _____
Area of New Structure: _____
Volume of New Structure: _____
Total Land Disturbed: _____

Cost of Alteration: \$ _____

Cost of New Building: \$ _____

Cost of Site Work \$ _____

Total Cost of New Building Work: \$ _____

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Please Print Name _____

ELECTRICAL

Contractor: _____
Address: _____
Phone#: _____
Lis #: _____
Federal Emp # or SSN _____

Technical Data

Item	Quantity
Lighting Fixtures	_____
Receptacles	_____
Switches	_____
Detectors	_____
Light Poles	_____
Motors w/ Fract. HP	_____
Emergency & Exit Lights	_____
Communication Points	_____
Alarm Devices/FAC Panel	_____
Total	_____

Pool (Receptacles, Switches, Lights, Motor 1HP) _____
Spa/Hot Tub/Storable Pool _____
Electric Range _____ KW
Oven/Surface Unit _____ KW
Electric Water Heater _____ KW
Electric Dryer _____ KW
Dishwasher _____ KW
Garbage Disposal _____ HP
A/C Unit - Central Air _____ KW
Space Heater/Air Handler _____ KW
Baseboard Heating _____ KW
Motors 1+ HP _____
Transformer/Generator _____ KW
Light Stander _____ AMP
Service _____ AMP
Subpanel _____ AMP
Motor Control Center _____ AMP
Sign/Outline Light _____ KW
Furnace _____
Steam Boiler _____
Other: _____

Estimated Cost of Electrical Work: _____

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Please Print Name _____

CONTRACTOR'S SEAL

Counter Form
PLEASE PRINT

PLUMBING

Contractor: Don Siegel Const Co Inc
Address: 565 Winding River Rd
Brick NJ 08724
Phone #: 732-785-1466
Lis #: _____
Federal Emp # or SSN 222 88 5787

Technical Data

Fixtures	Quantity
Water Closets (Toilet)	_____
Urinals/Bidets	_____
Bath Tub (w/or w/out shower head)	_____
Lavatory (BR Sink)	_____
Shower	_____
Floor Drain	_____
Sink	_____
Dishwasher	_____
Drinking Fountain	_____
Washing Machine	_____
Hose Bib	_____
Gas Piping	_____
Fuel Oil Piping	_____
Water Heater	_____
Steam Boiler	_____
Hot Water Boiler	_____
Sewer Pump	_____
Interceptor/Separator	_____
Backflow Preventer	_____
Greasetrapp	_____
Air Conditioner (Condensate Drain)	_____
Septic Tank Closure	_____
Sewer Service Connection	_____
Water Service Connection	<u>17</u>
Active Solar System	_____
Auxiliary Meter	_____
Sprinkler Heads	_____
Sump Pump	_____
Pool Heater	_____
Other:	_____

- 1) NEW 4" Ø FEED LINE, OFF
OF EXISTING 2" Ø SERVICE LINE
2) RECONNECTION OF SERVICES
TO NEW 4" Ø LINE
3) ALL WORK OUTSIDE BUILDINGS
Estimated Cost of Plumbing Work 3000.00

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: Donald B Siegel

Please Print Name: Donald B Siegel

CONTRACTOR'S SEAL

FIRE

Contractor: _____
Address: _____
Phone #: _____
Lis #: _____
Federal Emp # or SSN _____

Technical Data

Description of Work:

Heating Type: Gas Oil Electric Solar
Heating System is New Existing
Location of Furnace/Boiler: _____
Water Supply Source _____
Method of Valve Supervision _____
Local Alarm Supervision _____
Central Supervision: _____
Proprietary Supervision: _____

Flammable Storage Tanks	_____ capacity	_____ fuel
Combustible Storage Tanks	_____ capacity	_____ fuel
LPG Storage Tanks	_____ capacity	_____ fuel

Item	Quantity
Wet Sprinkler Heads	_____
Dry Sprinkler Heads	_____
Total	_____

Smoke Detectors _____
Heat Detectors _____
Total _____

Stand Pipes _____
Kitchen Hood Exhaust System _____

Pre-Engineered Systems:

CO2 Suppression _____
Halon Suppression _____
Foam Suppression _____
Dry Chemical _____
Wet Chemical _____

Gas/ Oil Fired Appliances:

Gas Stove _____
Gas Dryer _____
Furnace (Gas or Oil) _____
Gas Fireplace _____
Gas Logs _____
Total Appliances _____

Wood Burning Stove _____
Wood Fireplace _____
Other: _____

Estimated Cost of Fire Work _____

I hereby certify that I am the agent/owner of record and am authorized to make this application and perform the work listed on this application.

Signature: _____

Print Name: _____