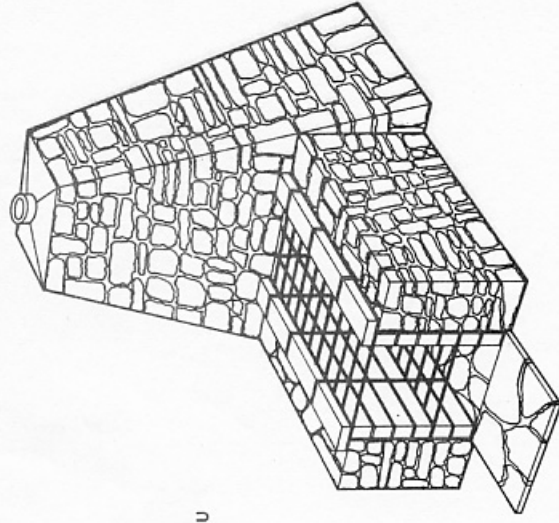
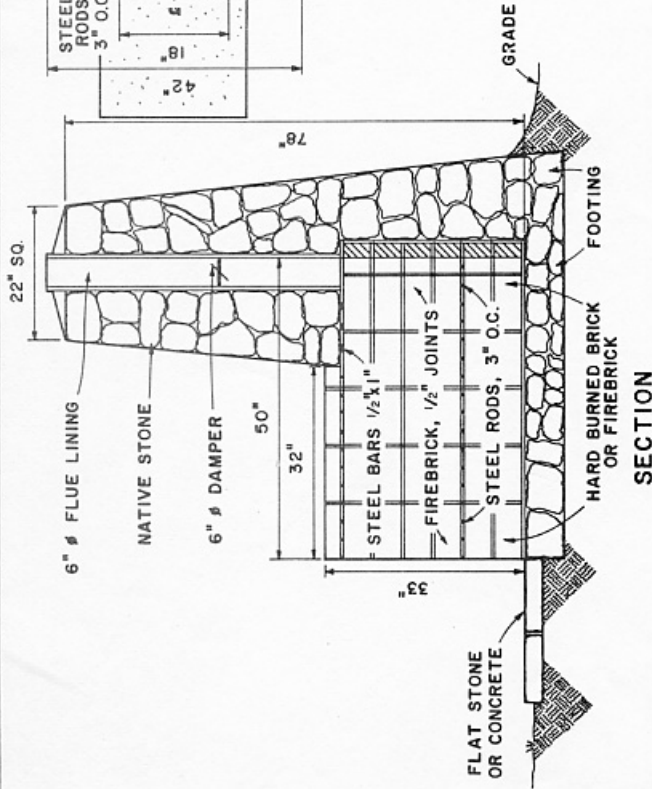


PLAN

# BILL OF MATERIALS

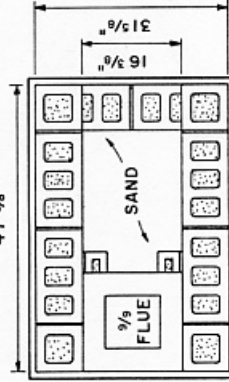
## STONE CONSTRUCTION

- 50 CU. FT. NATIVE STONE
- MORTAR: 1:3 MIX
- 5 BAGS CEMENT
- 11 CU. FT. SAND
- 98 FIREBRICK  $\frac{1}{2} \times \frac{1}{2} \times 22"$
- 3 STEEL BARS  $\frac{1}{2}" \phi \times 22"$
- 28 STEEL RODS  $\frac{1}{2}" \phi \times 22"$
- 1 FLUE LINING OR TILE 6"  $\phi \times 50"$
- 1 DAMPER 6"  $\phi$



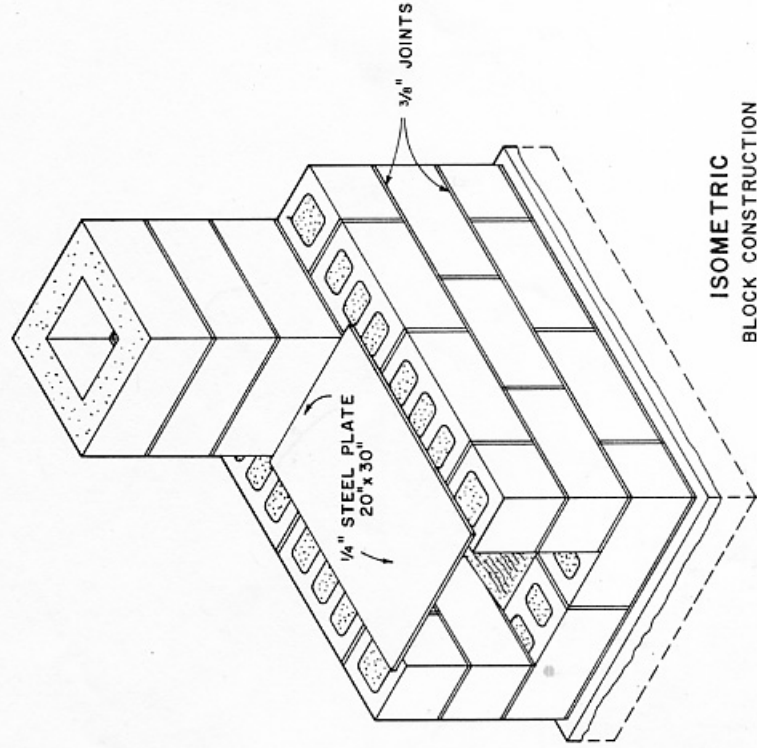
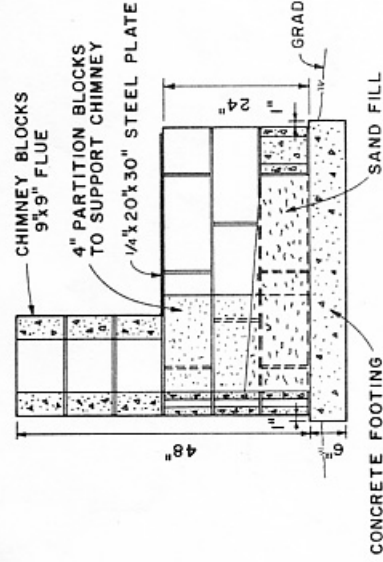
PERSPECTIVE

47  $\frac{5}{8}"$



PLAN

STEEL PLATE NOT SHOWN



# BILL OF MATERIALS

## CONCRETE BLOCK CONSTRUCTION

- 16 REGULAR BLOCKS 8"  $\times$  8"  $\times$  16"
- 6 HALF BLOCKS 8"  $\times$  8"  $\times$  8"
- 9 PARTITION BLOCKS 4"  $\times$  8"  $\times$  16"
- 3 CHIMNEY BLOCKS (9"  $\times$  9" OPENING 17"  $\times$  8"  $\times$  17")
- 1 STEEL PLATE  $\frac{1}{4}" \times 20" \times 30"$
- MORTAR:
  - 1 96 LB. SACK PORTLAND CEMENT
  - 1 100 LB. HYDRATED LIME
  - 300 LB. MASON SAND
- 2 CONCRETE BASE:
  - 96 LB. SACKS OF PORTLAND CEMENT
  - 400 LB. SAND
  - 500 LB. GRAVEL OR STONE

BASED ON: OREGON, VIRGINIA AND NATIONAL PARK SERVICE PLANS.



COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF TENNESSEE  
UNIVERSITY OF TENNESSEE  
AGRICULTURAL ENGINEERING DEPARTMENT  
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

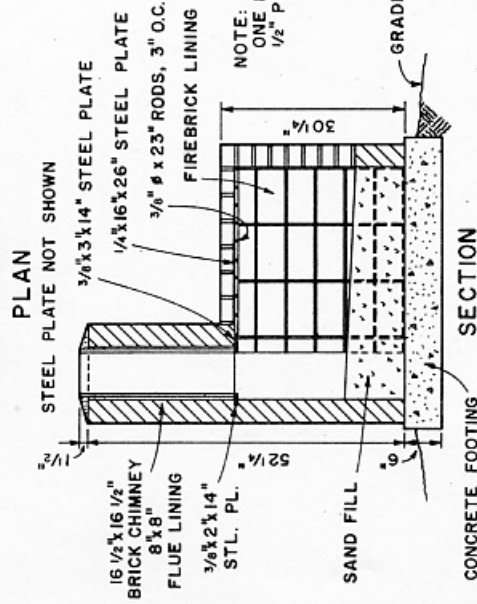
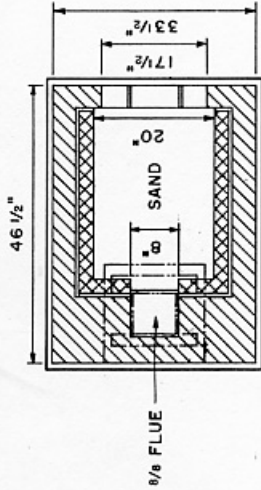
OUTDOOR FIREPLACES

USDA

'76

6261

SHEET 1 OF 2



## BILL OF MATERIALS

BRICK CONSTRUCTION	
325	FIREBRICK (COMMON OR FACE)
44	FLUE LINING 8"x8"
1	RODS 3/8" x 23"
9	STEEL PLATE 3/16"x3 1/4"
1	STEEL PLATE 3/16"x2 1/4"
9	STEEL PLATE 1/4"x16"x26"
9	PCS. OF 1/2" PIPE 3' LG.
MORTAR:	
2	96 LB. SACKS PORTLAND CEMENT
200	LB. HYDRATED LIME
800	LB. MASON SAND
CONCRETE BASE:	
2	96 LB. SACKS PORTLAND CEMENT
400	LB. SAND
500	LB. GRAVEL OR STONE

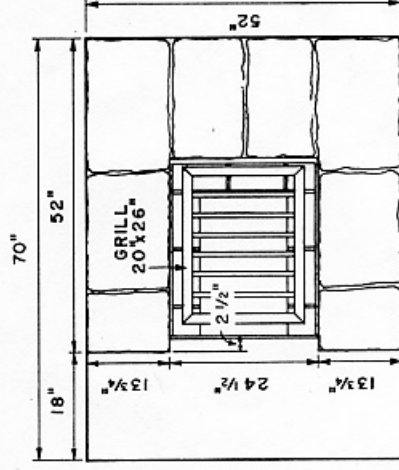
NOTE:  
ONE END OF 3/8" x 23" RODS IS PLACED IN  
1/2" PIPE TO ALLOW RODS TO EXPAND.

## ISOMETRIC

BRICK CONSTRUCTION  
12" 6" 0 1'

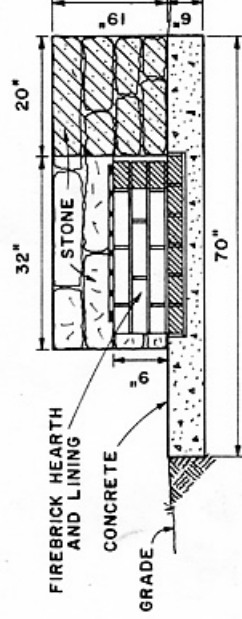
## BILL OF MATERIALS

FLAT STONE CONSTRUCTION	
37	FIREBRICK (9 1/4"x2 1/2"x1 1/2")
20	CU. FT. FLAT STONE
2	CU. FT. MORTAR (1:3 MIX)
1	GRILL 20"x26"x3/4"
MADE FROM 3/4"x1 1/2" SQ.	
STEEL FRAME 8 3/4" SQ.	
BARS COMPLETELY WELDED	
FOUNDATION: 1:2 1/4:3 MIX	
CEMENT-3 SACKS	
SAND-7 CU. FT.	
GRAVEL-11 1/4 CU. FT.	

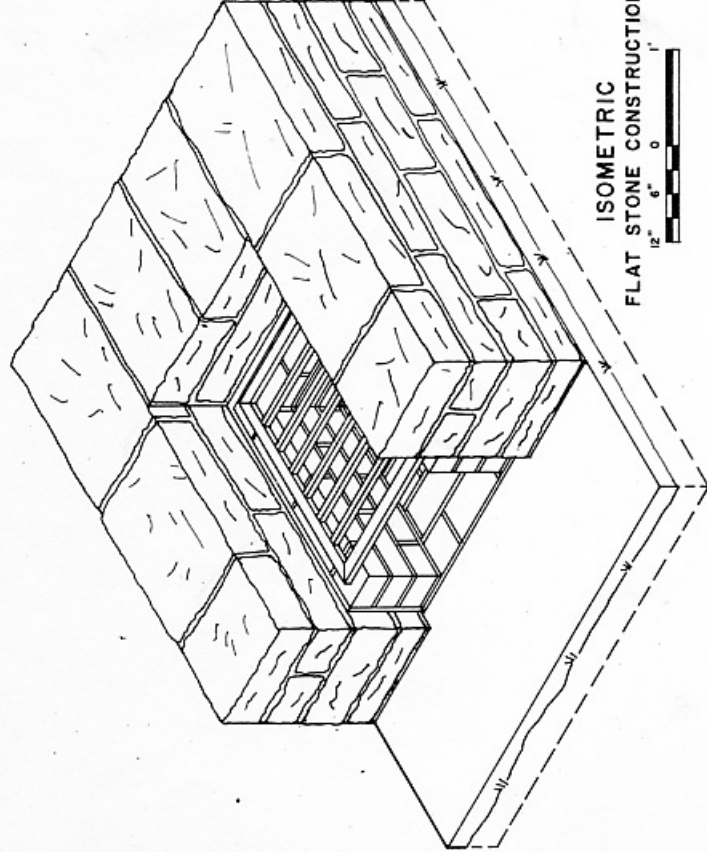


## PLAN

12" 6" 0 1'



## SECTION



## ISOMETRIC

FLAT STONE CONSTRUCTION  
12" 6" 0 1'