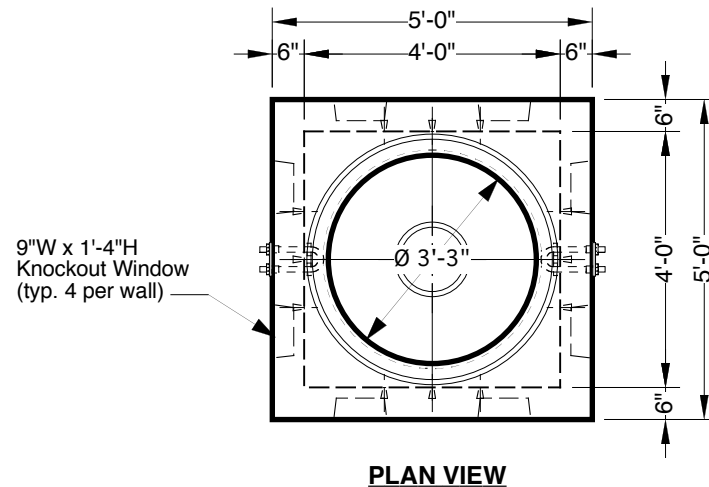


4' x 4' x 7' Manhole

Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

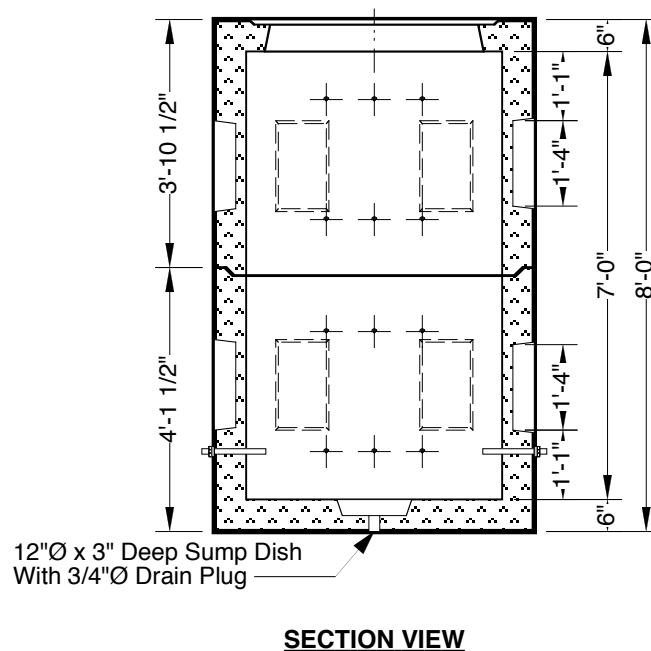
Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

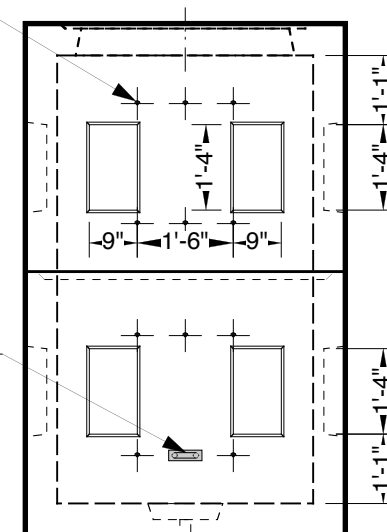
- Options -
Cast Iron, Heavy Duty Frame & Cover
6", 12", & 24" High Grade Adjustment Rings
Hot-Dipped Galvanized Steel Ladder
Hardware
Height Requirements To The Nearest Inch

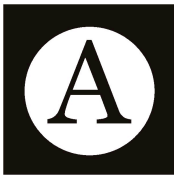
Approximate Weight Total: ± 12,400 Lbs.
Bottom Section : ± 6,500 Lbs. Top Section: ± 5,900 Lbs.



Ø1/2" Threaded
Embedded
Inserts in Walls

1"Ø Pulling
Iron typ. (2)



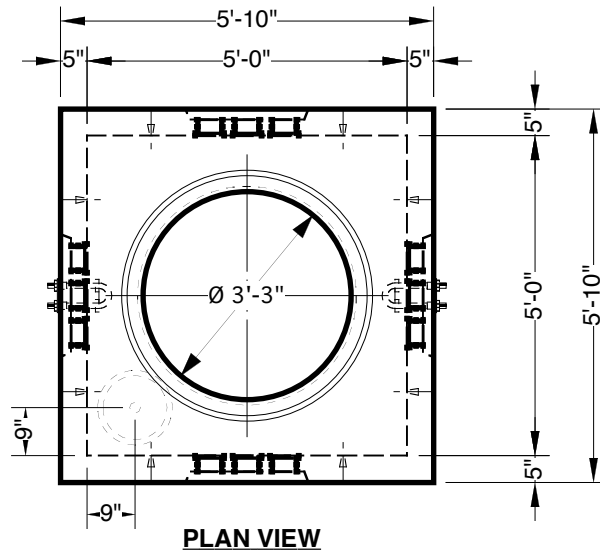


5' x 5' x 6' Manhole

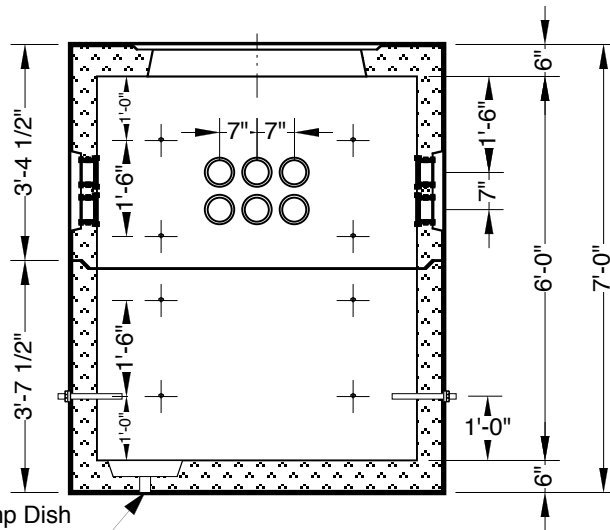
Advance Concrete Products Company



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PLAN VIEW



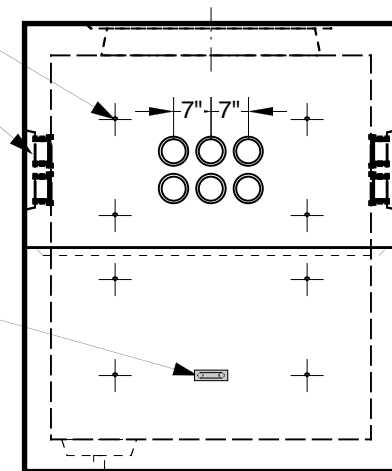
12"Ø x 3" Deep Sump Dish
With 3/4"Ø Drain Plug

SECTION VIEW

Ø1/2" Threaded
Embedded
Inserts in Walls

4"Ø Duct
Terminators

1"Ø Pulling
Iron typ. (2)



END VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

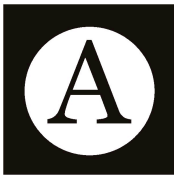
Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

- Options -

Cast Iron, Heavy Duty Frame & Cover
6", 12", & 24" High Grade Adjustment Rings
Hot-Dipped Galvanized Steel Ladder
Hardware
8" Thick Walls For Extra Heavy Loading Conditions
Height Requirements To The Nearest Inch

Approximate Weight Total: ± 12,800 Lbs.
Bottom Section : ± 6,700 Lbs. Top Section: ± 6,100 Lbs.

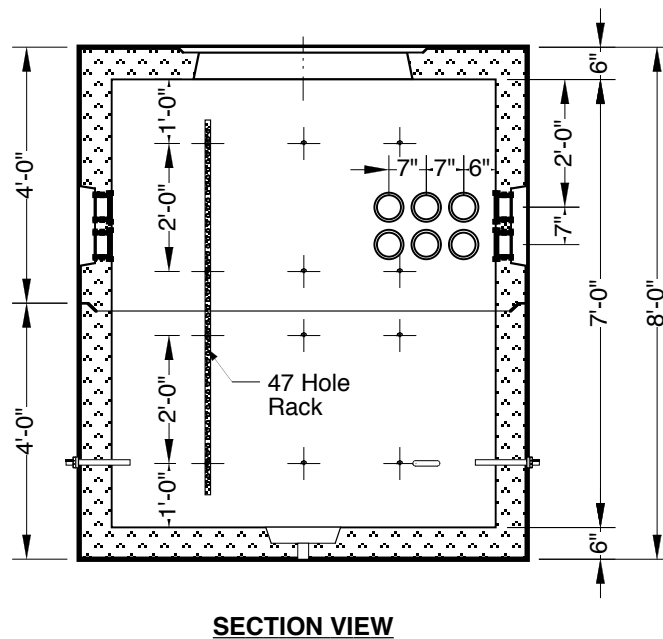
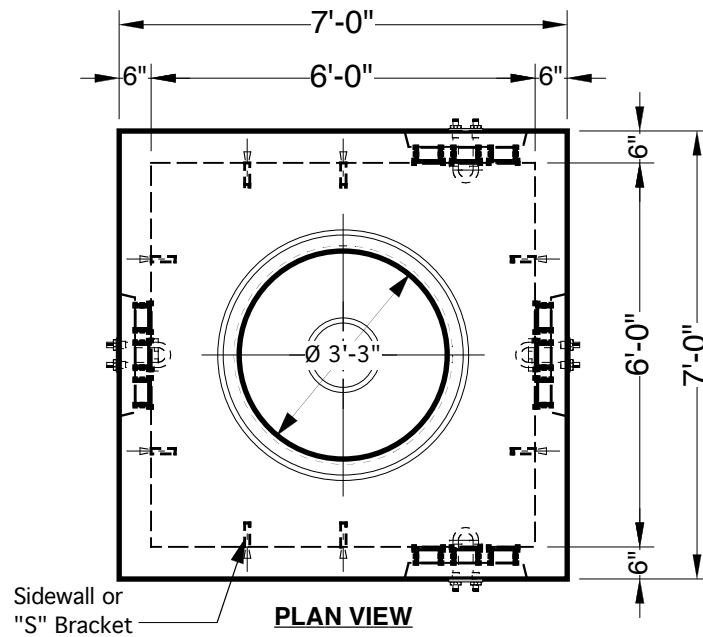


6' x 6' x 7' Manhole

Advance Concrete Products Company



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All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

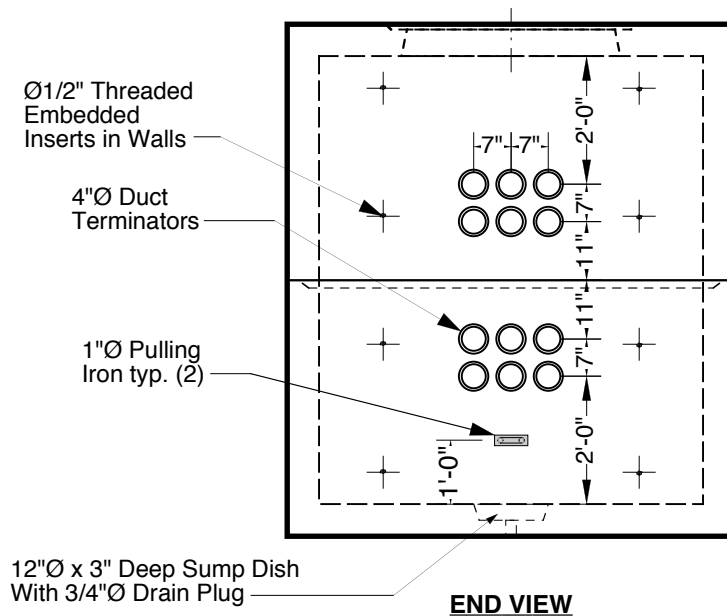
Standard Structural Design Based On AASHTO HS-20 Wheel Loading.

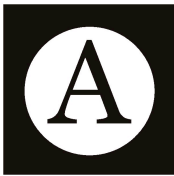
-Optional Galvanized Steel Hardware Package-

"S" Brackets	12
"B" Brackets	6
47 Hole Racks	8
1/2" X 13 X 1 1/4" Bolts	18
1/2" X 13 Nuts	18
1/2" X 13 X 1 3/4" Bolts	24
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

Approximate Weight Total: ± 21,000 Lbs.
Bottom Section : ± 10,500 Lbs. Top Section: ± 10,500 Lbs.



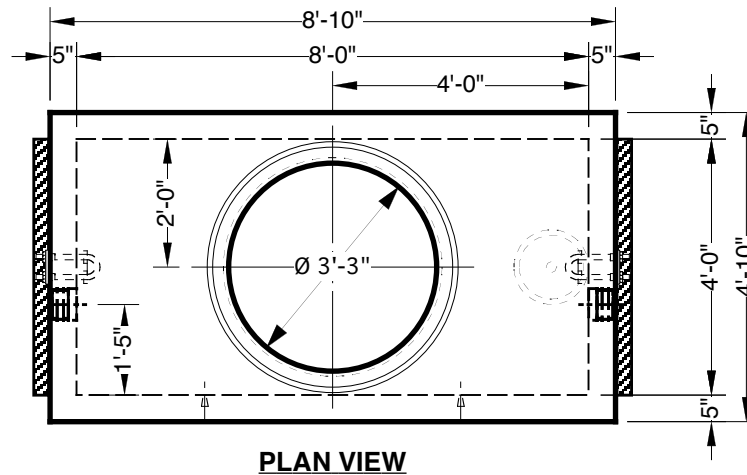


8' x 4' x 6' DTE Mini-Manhole (Jointhole)

Advance Concrete Products Company

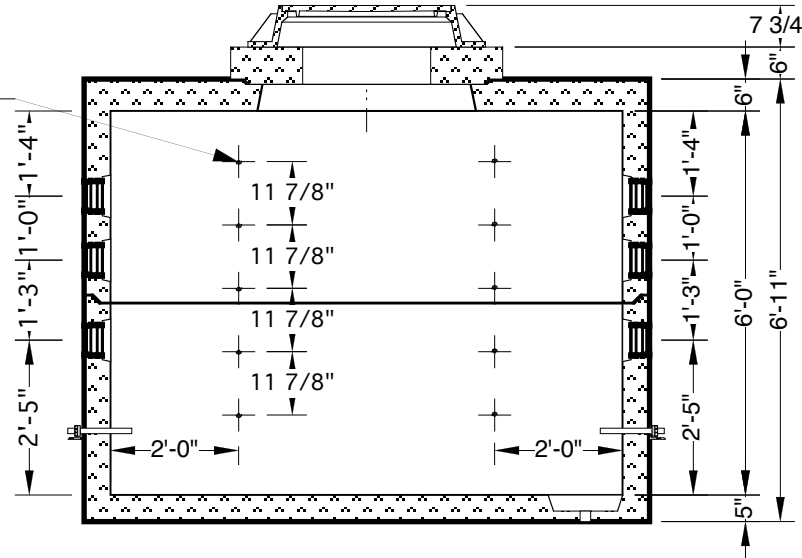


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PLAN VIEW

Ø1/2" Threaded
Embedded Inserts



SECTION VIEW

EJIW #1266 Frame and HD Cast
Iron Cover with "DETROIT EDISON" Logo

6" High Grade Adjustment
Ring Provided

(3) Terminators for
Ø5" PVC Conduit
(typ. 2 walls)

3"x3"x1/4" Galv.
Steel Angle - 4' Long at
Pulling Iron Location
(typ. 2)

12"Ø x 3" Deep Sump Dish
With 3/4"Ø Drain Plug

END VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

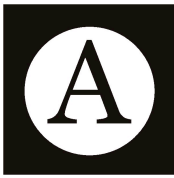
Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

-Optional Hardware Package-
(2) 33" Non-Metallic Vertical Racks
(2) 22" Non-Metallic Vertical Racks
(10) 1/2"-13 x 3 1/2" SS Bolts with Washers

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 15,000 Lbs.
Bottom Section : ± 7,500 Lbs. Top Section: ± 7,500 Lbs.

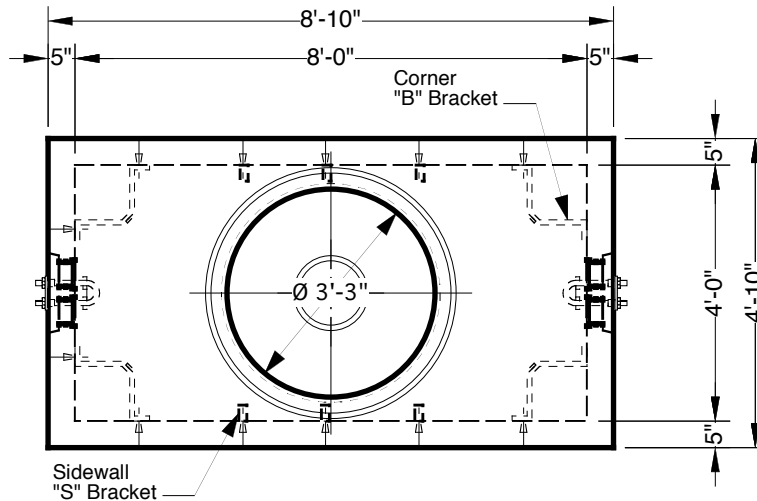


8' x 4' x 6' Type SA Manhole

Advance Concrete Products Company

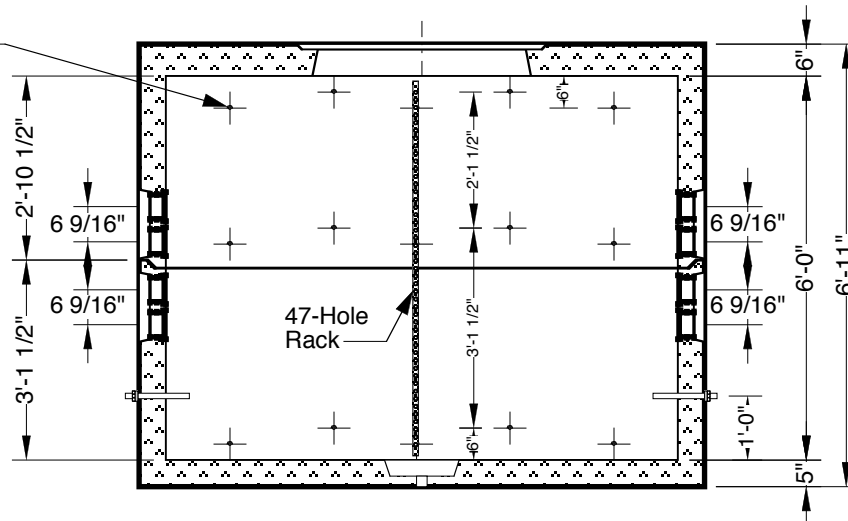


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PLAN VIEW

Ø1/2" Threaded
Embedded
Inserts in Walls



SECTION VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

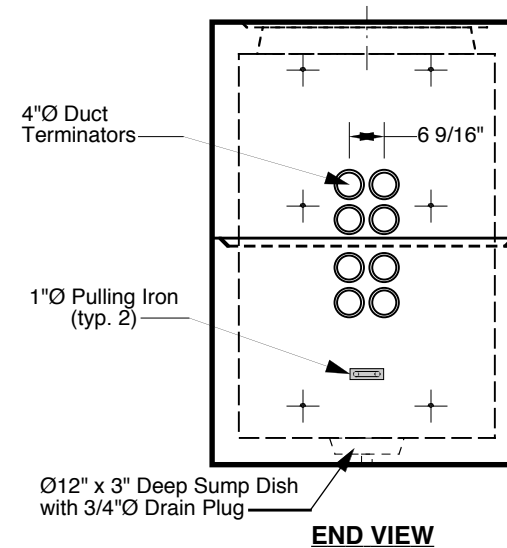
-Optional Galvanized Steel Hardware Package-

"S" Brackets	12
"B" Brackets	12
47 Hole Racks	10
1/2" X 13 X 1 1/4" Bolts	24
1/2" X 13 Nuts	24
1/2" X 13 X 1 3/4" Bolts	30
7'-0" Hooked Ladder	1

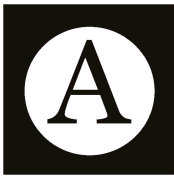
1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 15,000 Lbs.
Bottom Section : ± 7,500 Lbs. Top Section: ± 7,500 Lbs.



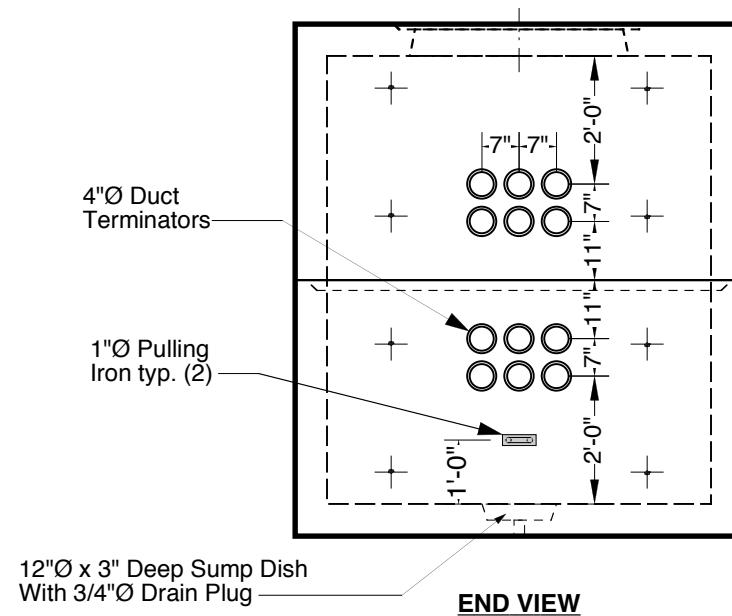
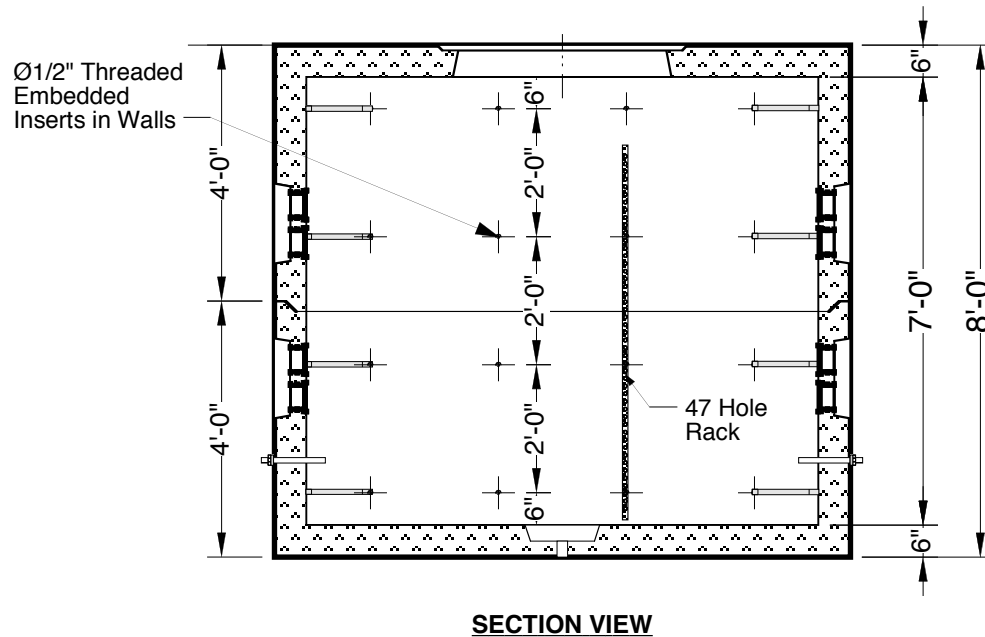
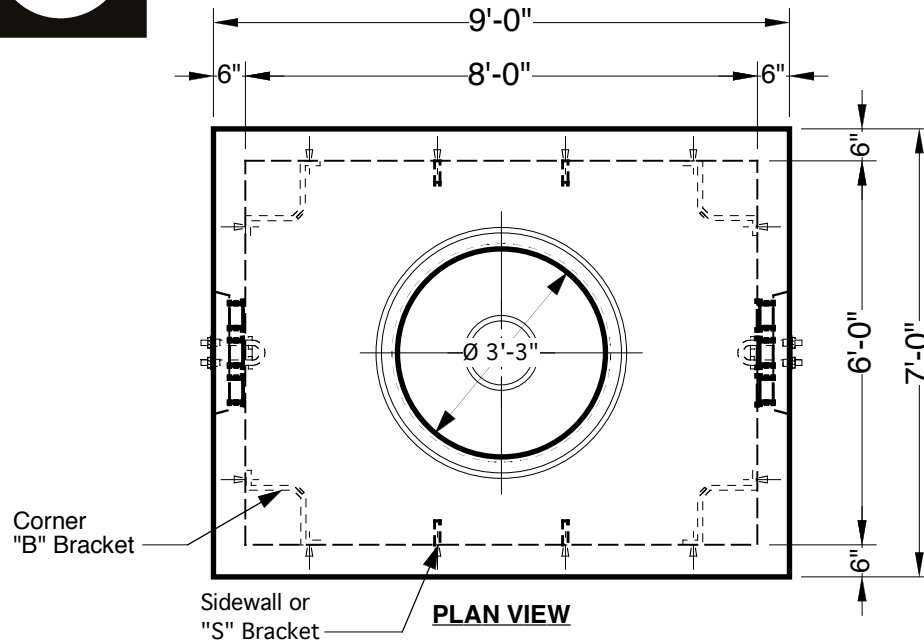
END VIEW



8' x 6' x 7' Type A Manhole

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All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS-20 Wheel Loading.

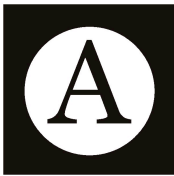
-Optional Galvanized Steel Hardware Package-

"S" Brackets	16
"B" Brackets	16
47 Hole Racks	8
1/2" X 13 X 1 1/4" Bolts	24
1/2" X 13 Nuts	24
1/2" X 13 X 1 3/4" Bolts	48
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 24,800 Lbs.
Bottom Section : ± 12,700 Lbs. Top Section: ± 12,100 Lbs.

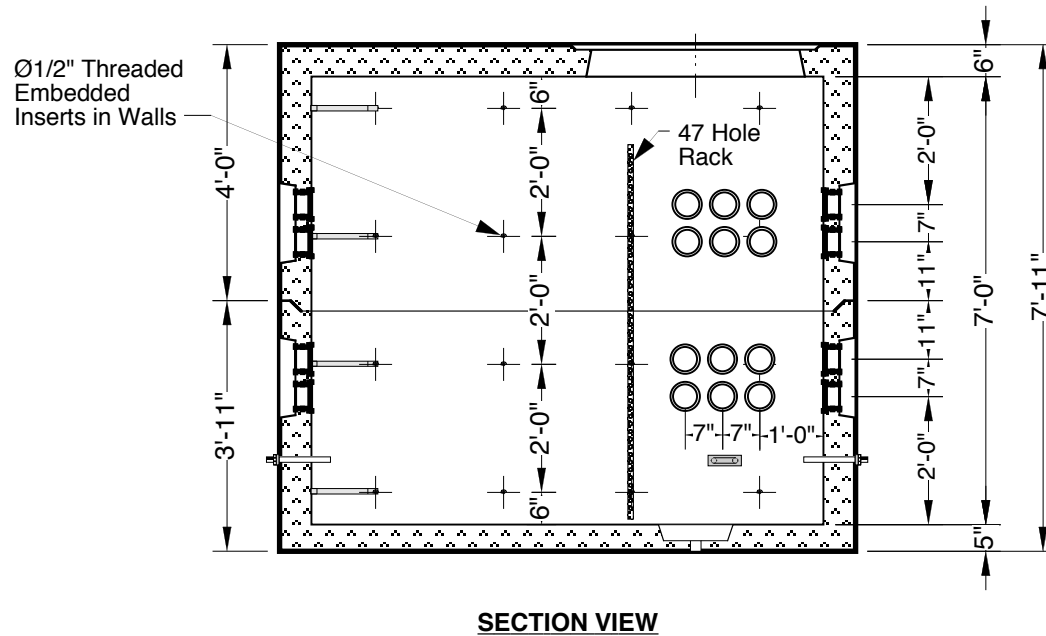
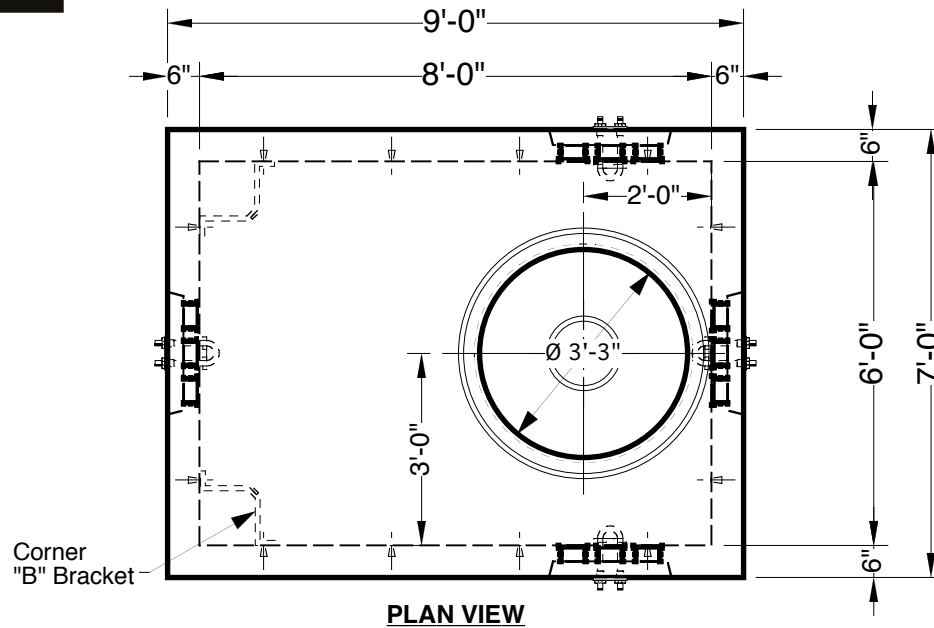


8' x 6' x 7' Type J Manhole

Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS-20 Wheel Loading.

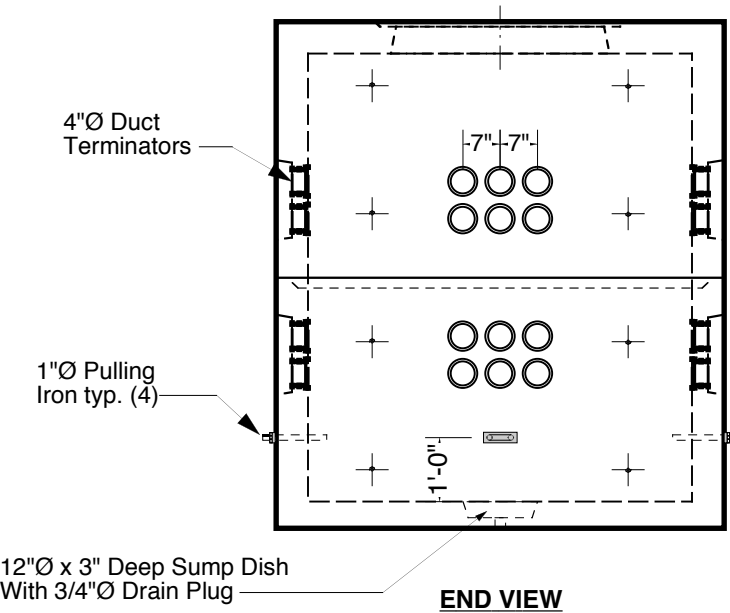
-Optional Galvanized Steel Hardware Package-

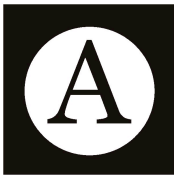
"S" Brackets	12
"B" Brackets	16
47 Hole Racks	6
1/2" X 13 X 1 1/4" Bolts	24
1/2" X 13 Nuts	24
1/2" X 13 X 1 3/4" Bolts	36
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 24,800 Lbs.
Bottom Section : ± 12,700 Lbs. Top Section: ± 12,100 Lbs.



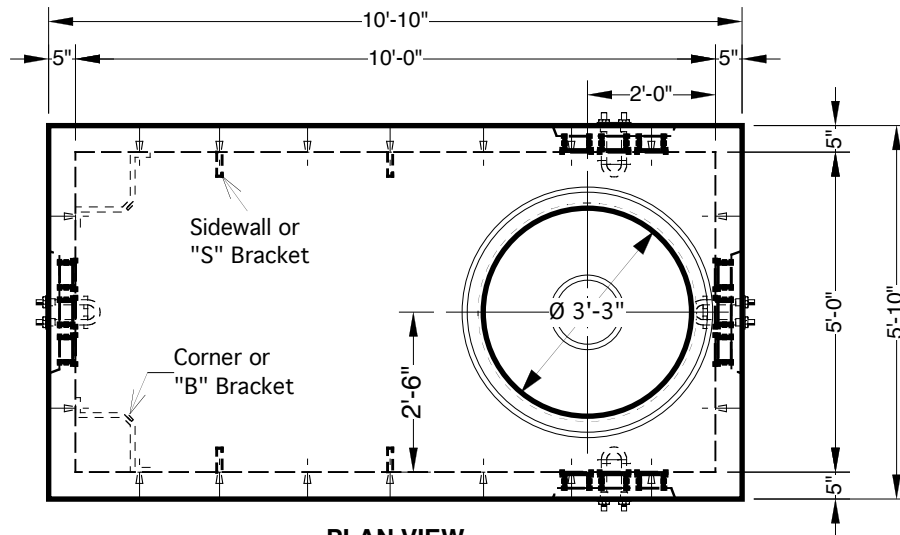


10' x 5' x 7' Type J Manhole

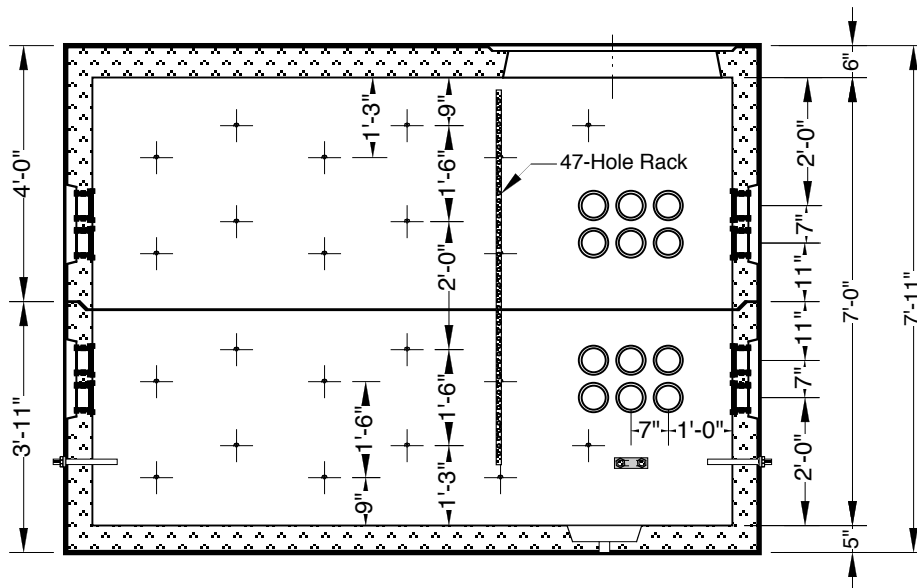
Advance Concrete Products Company



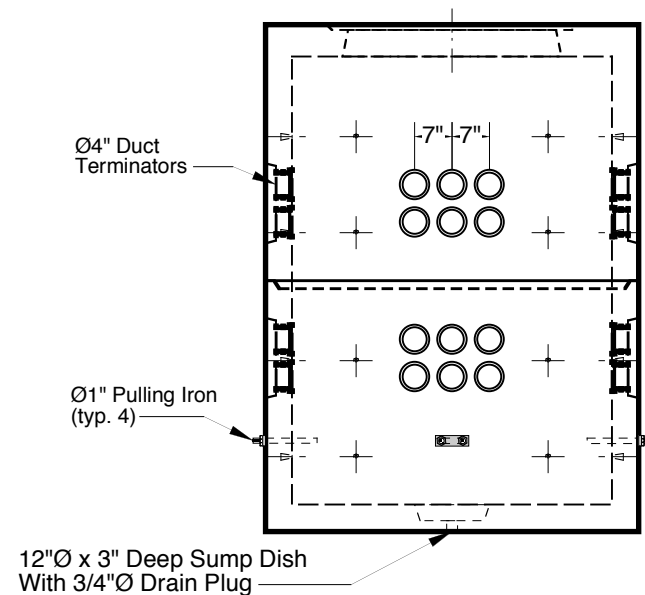
(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



PLAN VIEW



SECTION VIEW



END VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS-20 Wheel Loading.

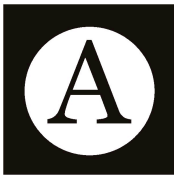
-Optional Galvanized Steel Hardware Package-

"S" Brackets	24
"B" Brackets	8
47 Hole Racks	12
1/2" X 13 X 1 1/4" Bolts	64
1/2" X 13 Nuts	64
1/2" X 13 X 1 3/4" Bolts	32
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 22,000 Lbs.
Bottom Section : ± 11,000 Lbs. Top Section: ± 11,000 Lbs.



10' x 5' x 7' Type A Manhole

Advance Concrete Products Company



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All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

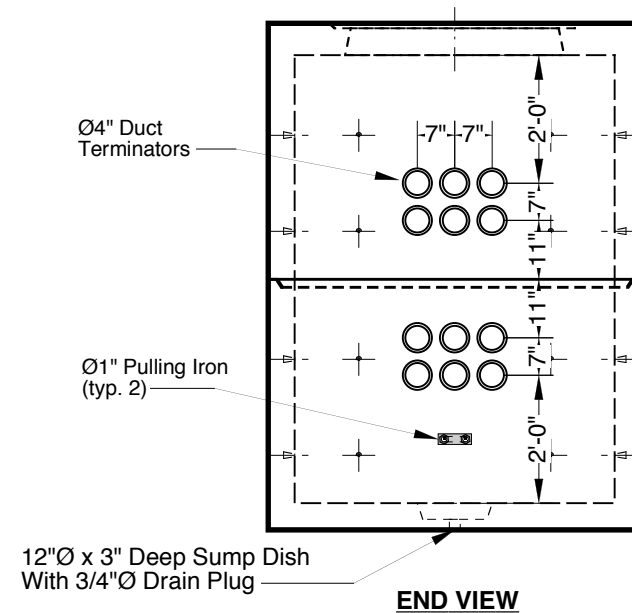
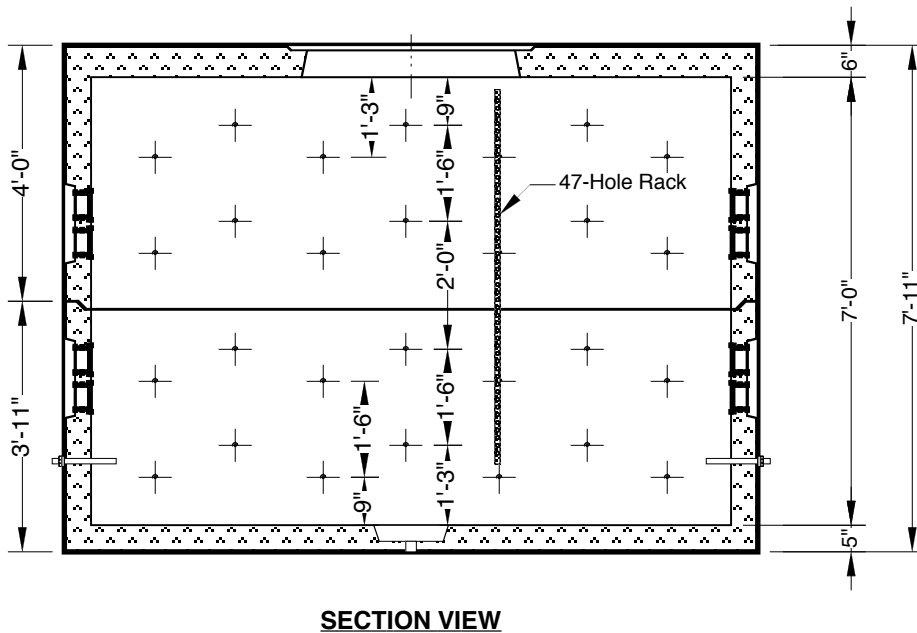
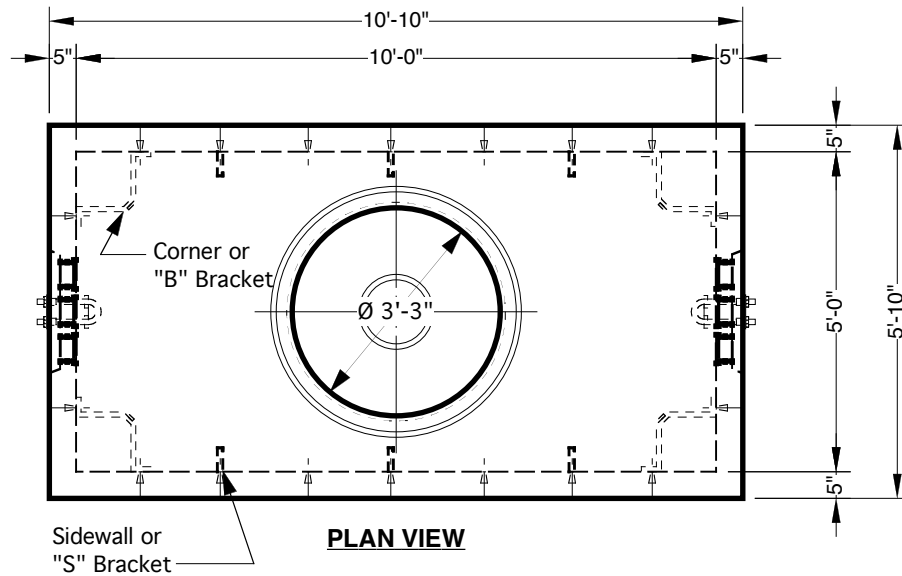
-Optional Galvanized Steel Hardware Package-

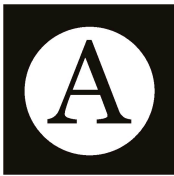
"S" Brackets	16
"B" Brackets	16
47 Hole Racks	8
1/2" X 13 X 1 1/4" Bolts	24
1/2" X 13 Nuts	24
1/2" X 13 X 1 3/4" Bolts	48
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 22,000 Lbs.
Bottom Section : ± 11,000 Lbs. Top Section: ± 11,000 Lbs.



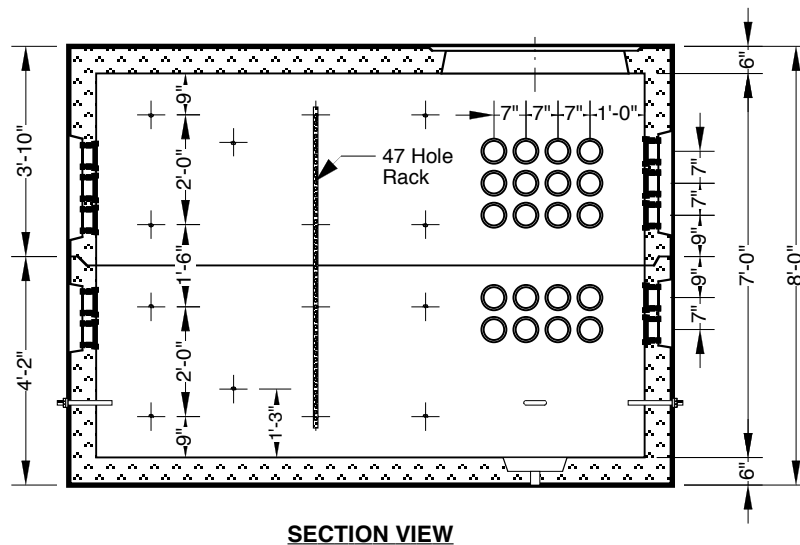
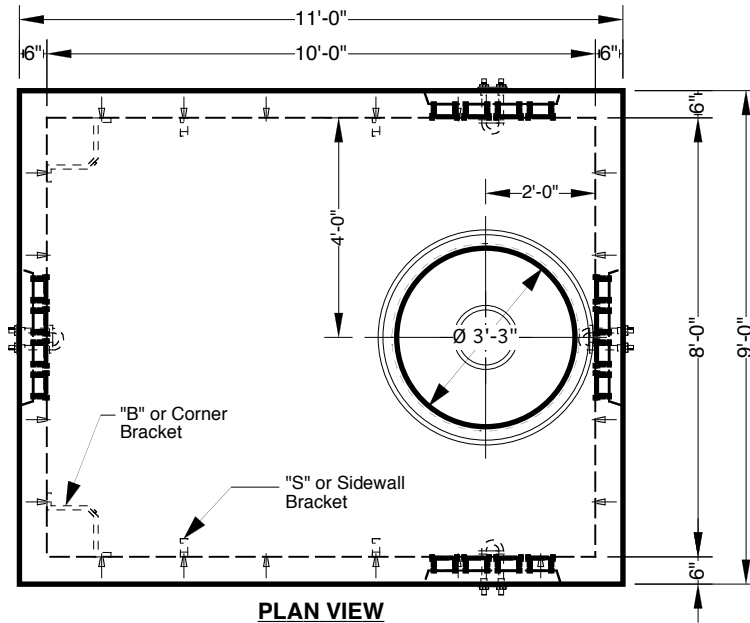


10' x 8' x 7' Type J Manhole

Advance Concrete Products Company



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All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

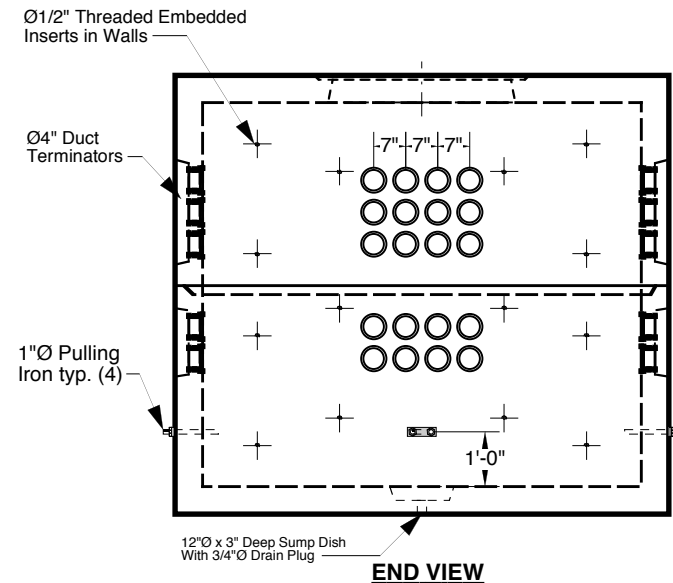
-Optional Galvanized Steel Hardware Package-

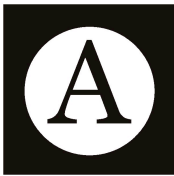
"S" Brackets	24
"B" Brackets	8
47 Hole Racks	12
1/2" X 13 X 1 1/4" Bolts	32
1/2" X 13 Nuts	32
1/2" X 13 X 1 3/4" Bolts	64
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 34,700 Lbs.
Bottom Section : ± 17,700 Lbs. Top Section: ± 17,000 Lbs.



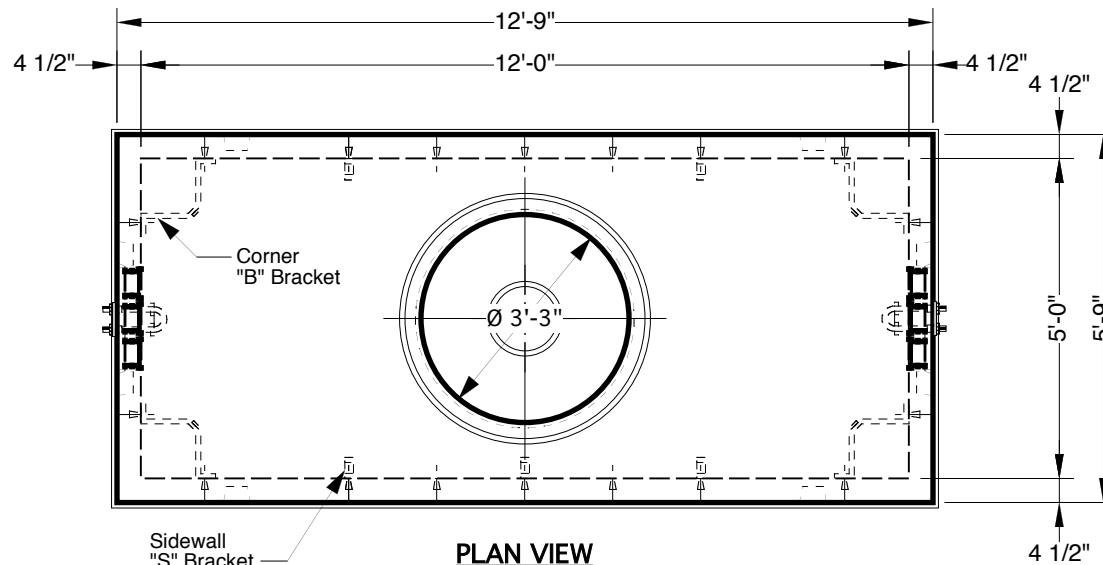


12' x 5' x 6'-6" Type A Manhole

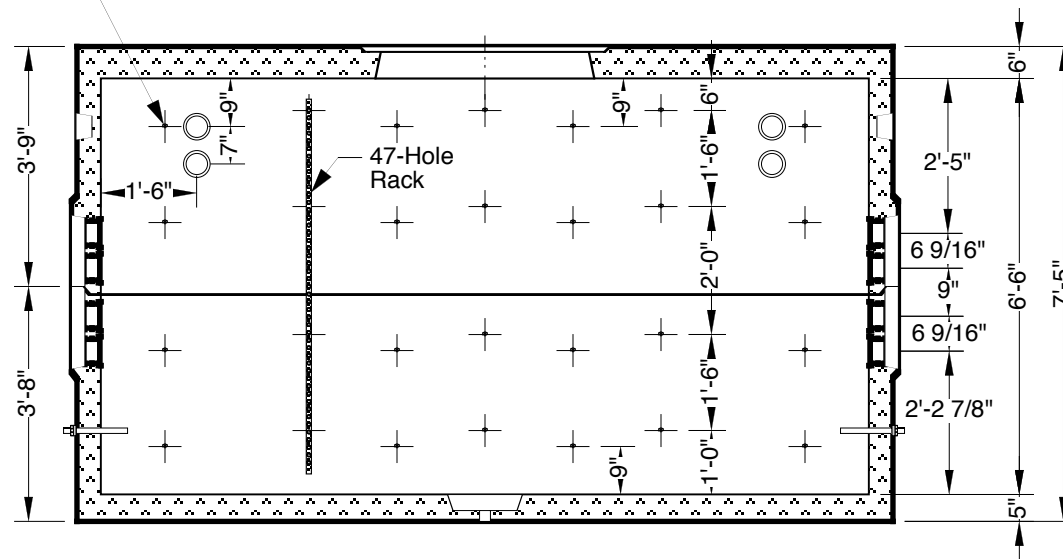
Advance Concrete Products Company



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$\varnothing 1/2"$ Threaded
Embedded Inserts



All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

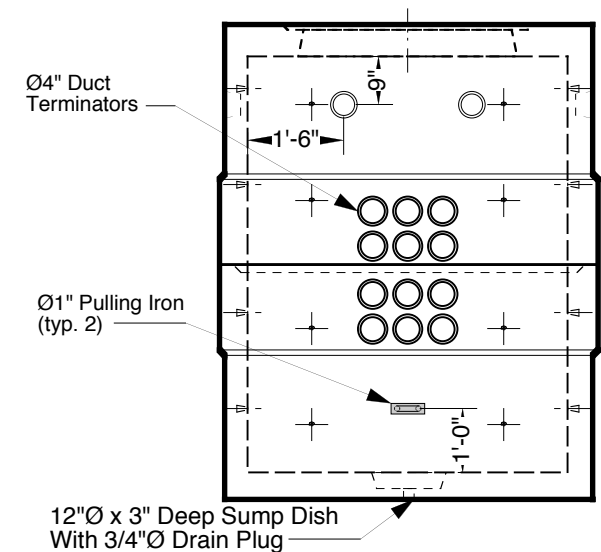
-Optional Galvanized Steel Hardware Package-

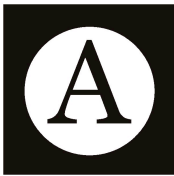
"S" Brackets	24
"B" Brackets	16
47 Hole Racks	14
1/2" X 13 X 1 1/4" Bolts	40
1/2" X 13 Nuts	40
1/2" X 13 X 1 3/4" Bolts	72
8'-0" Hooked Ladder	1

1" \varnothing Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: $\pm 25,000$ Lbs.
Bottom Section: $\pm 12,500$ Lbs. Top Section: $\pm 12,500$ Lbs.



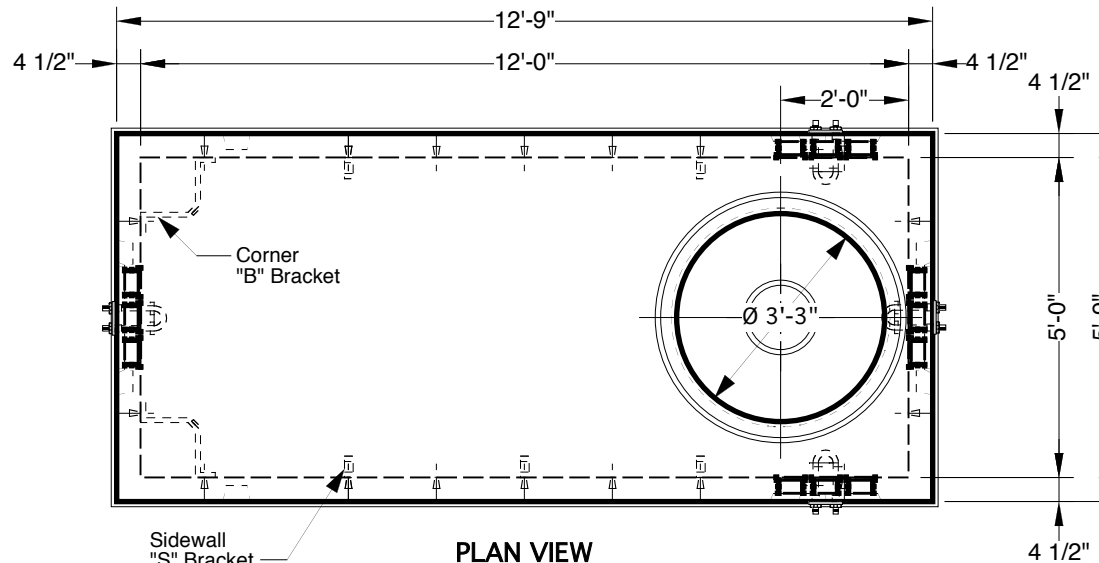


12' x 5' x 6'-6" Type J Manhole

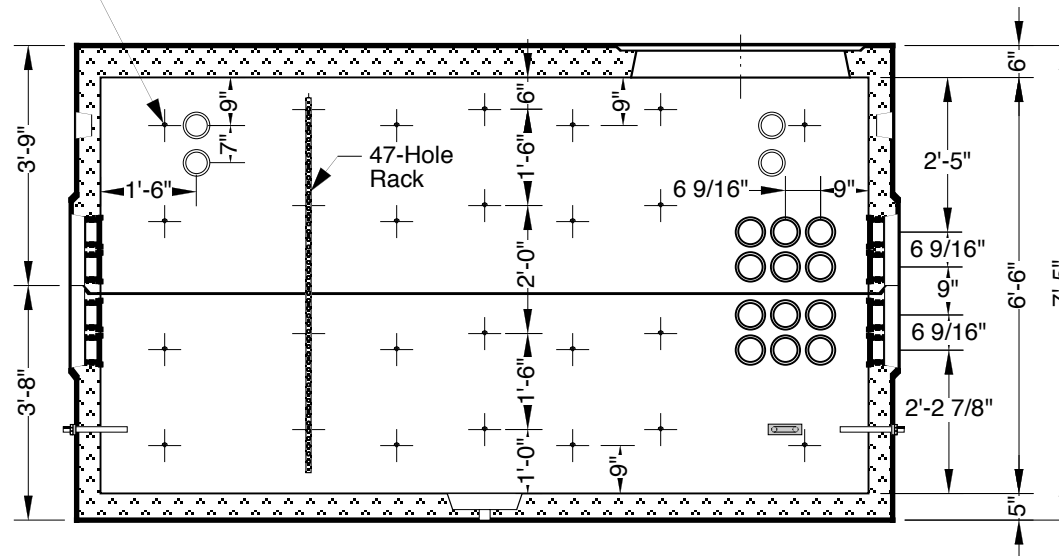
Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



Ø1/2" Threaded
Embedded Inserts



SECTION VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

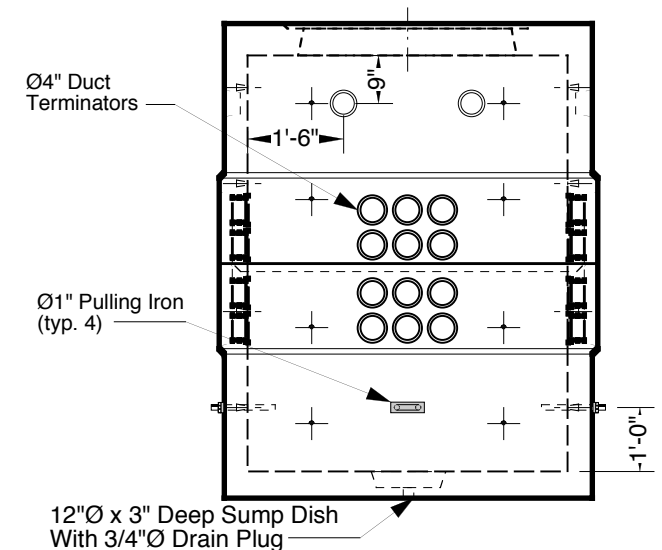
-Optional Galvanized Steel Hardware Package-

"S" Brackets	24
"B" Brackets	8
47 Hole Racks	14
1/2" X 13 X 1 1/4" Bolts	32
1/2" X 13 Nuts	32
1/2" X 13 X 1 3/4" Bolts	56
8'-0" Hooked Ladder	1

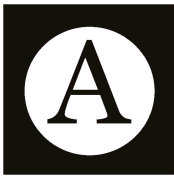
1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 25,000 Lbs.
Bottom Section : ± 12,500 Lbs. Top Section: ± 12,500 Lbs.



RIGHT END VIEW

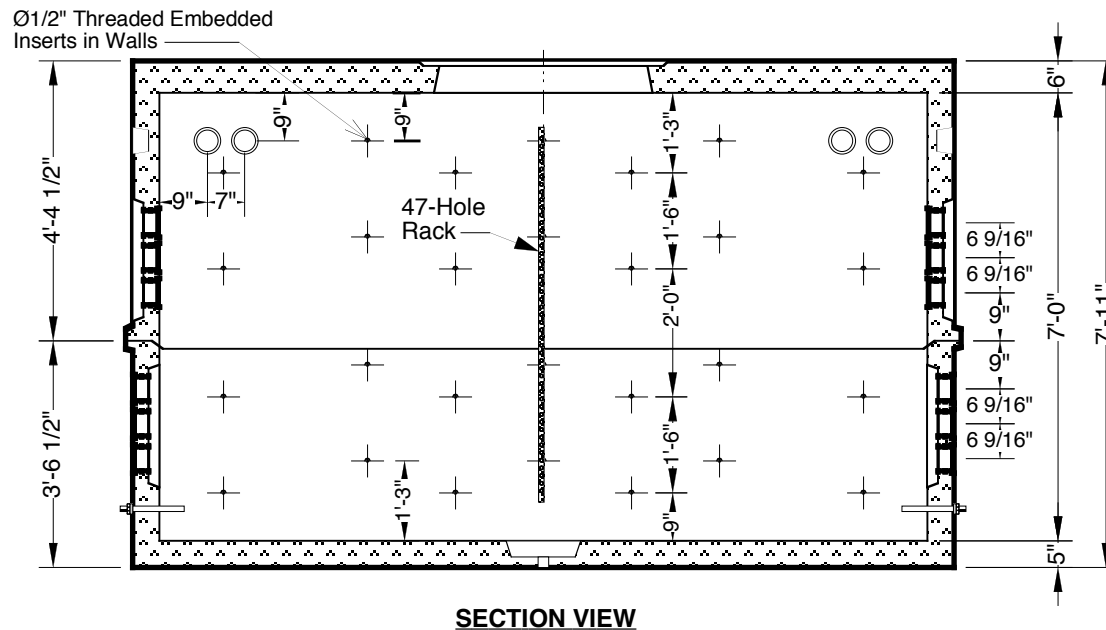
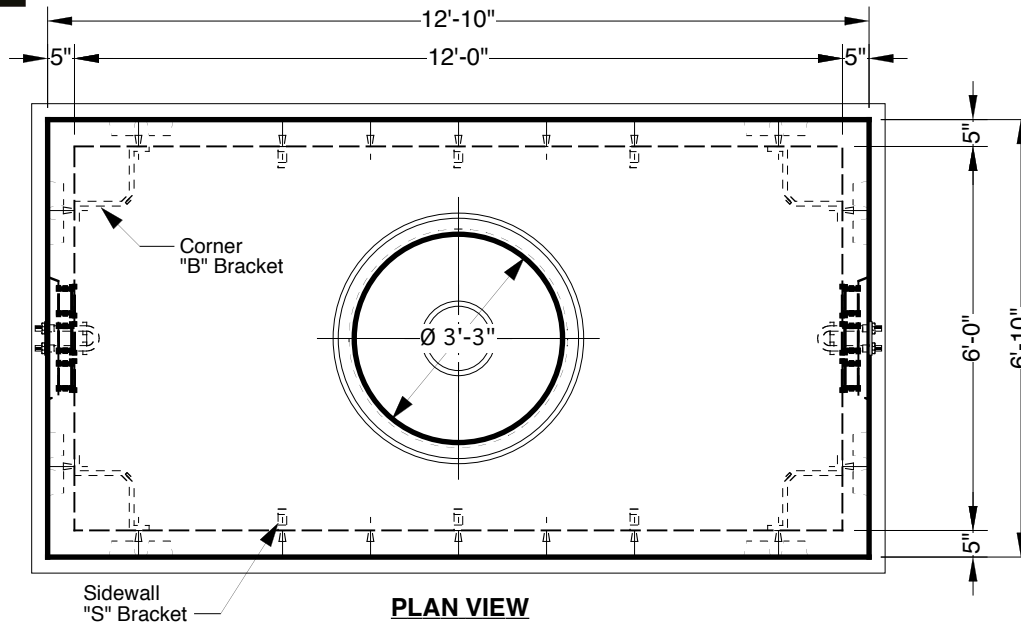


12' x 6' x 7' Type A-1 Manhole

Advance Concrete Products Company



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All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar. Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

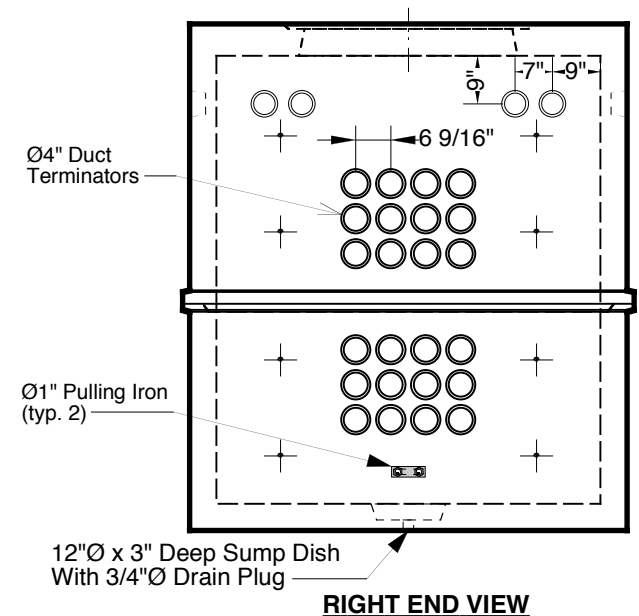
-Optional Galvanized Steel Hardware Package-

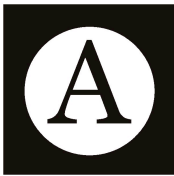
"S" Brackets	24
"B" Brackets	16
47 Hole Racks	14
1/2" X 13 X 1 1/4" Bolts	40
1/2" X 13 Nuts	40
1/2" X 13 X 1 3/4" Bolts	72
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade Adjustment Rings Available

Approximate Weight Total: ± 28,500 Lbs.
Bottom Section : ± 14,250 Lbs. Top Section: ± 14,250 Lbs.



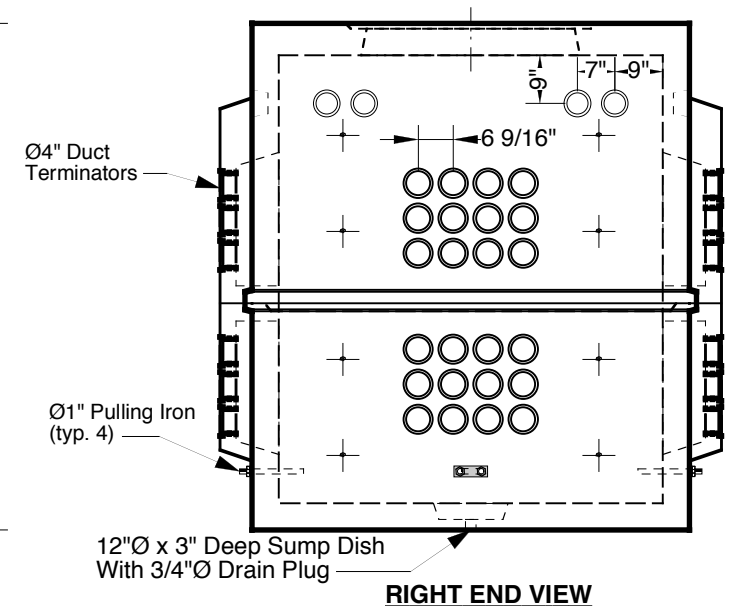
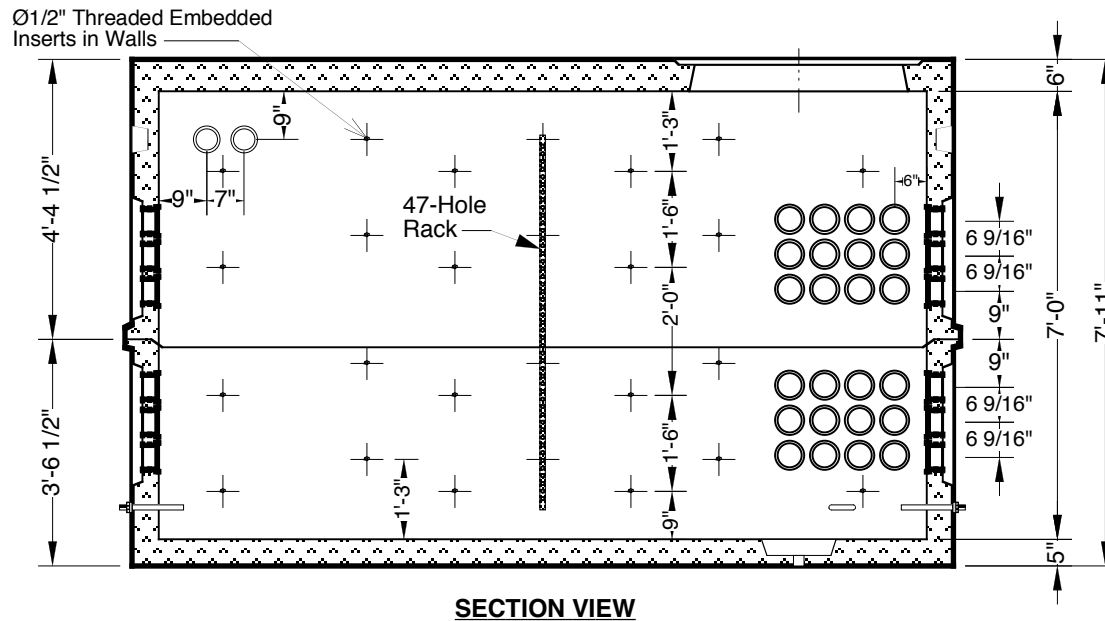
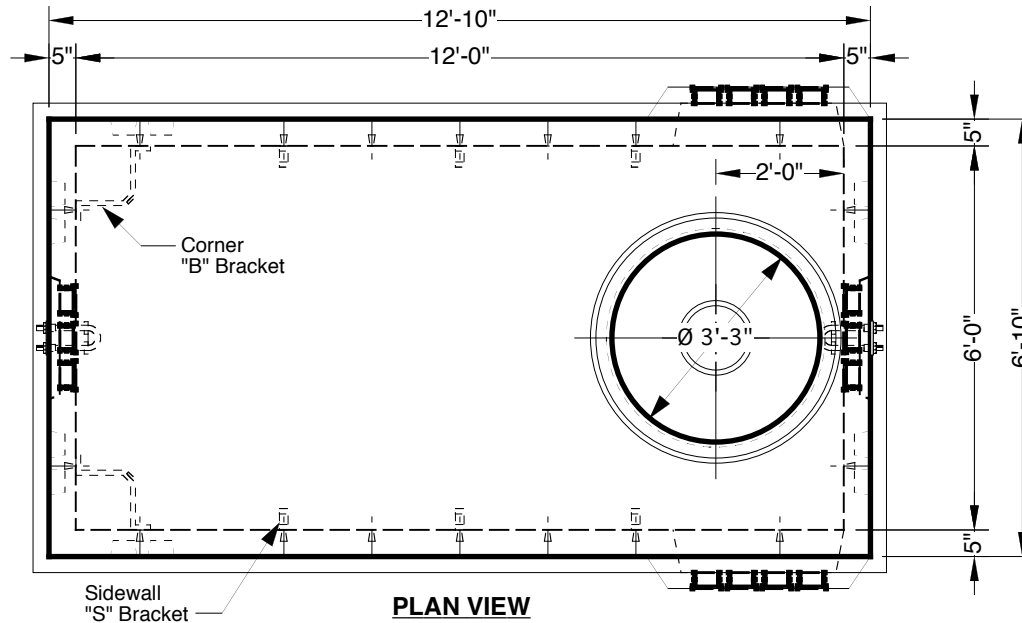


12' x 6' x 7' Type J3-1 Manhole

Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

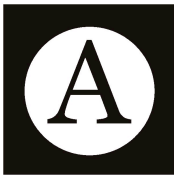
-Optional Galvanized Steel Hardware Package-

"S" Brackets	24
"B" Brackets	8
47 Hole Racks	12
1/2" X 13 X 1 1/4" Bolts	64
1/2" X 13 Nuts	64
1/2" X 13 X 1 3/4" Bolts	32
8'-0" Hooked Ladder	1

1" \varnothing Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: \pm 28,500 Lbs.
Bottom Section : \pm 14,250 Lbs. Top Section: \pm 14,250 Lbs.



12' x 6' x 9'-6" Type A Manhole

Advance Concrete Products Company



(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755

All Concrete Shall Have A 28 Day Compressive Strength Of 5000 PSI.

Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.

Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

- Optional Galvanized Steel Hardware Package -

"S" Brackets	36
"B" Brackets	24
47 Hole Racks	14
18 Hole Racks	14
1/2" X 13 X 1 1/4" Bolts	60
1/2" X 13 Nuts	60
1/2" X 13 X 1 3/4" Bolts	100
11'-0" Hooked Ladder	1

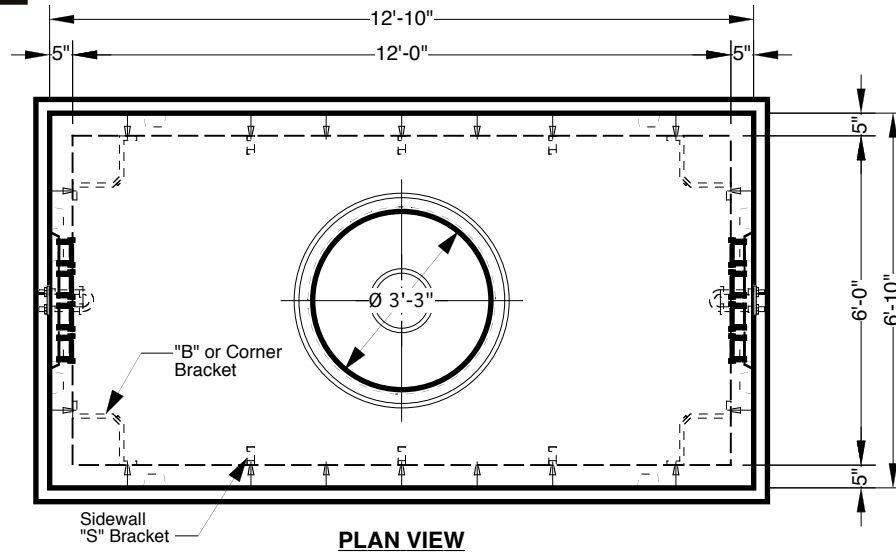
1" Ø Butyl Rubber Rope Mastic Is Provided For Placement
Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade
Adjustment Rings Available

Approximate Weight Total: ± 35,500 Lbs.

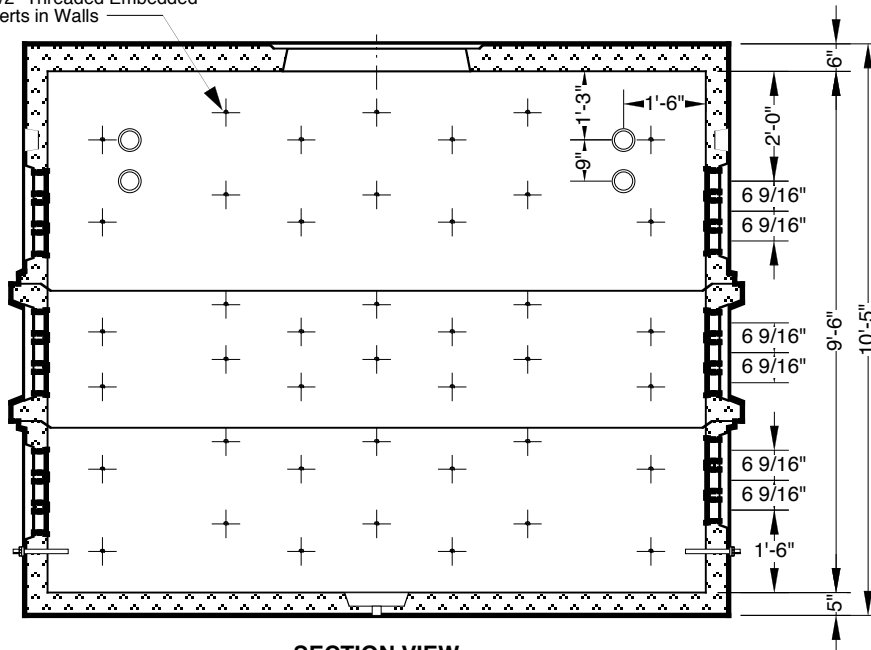
Bottom Section : ± 14,000 Lbs. Top Section: ± 14,000 Lbs.

Mid Section: ± 7,500 Lbs.

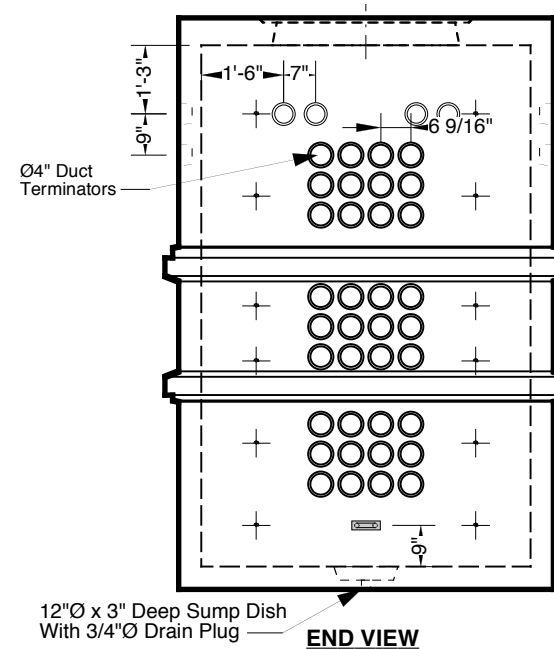


PLAN VIEW

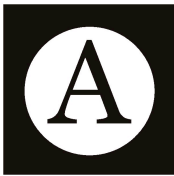
Ø1/2" Threaded Embedded
Inserts in Walls



SECTION VIEW



END VIEW

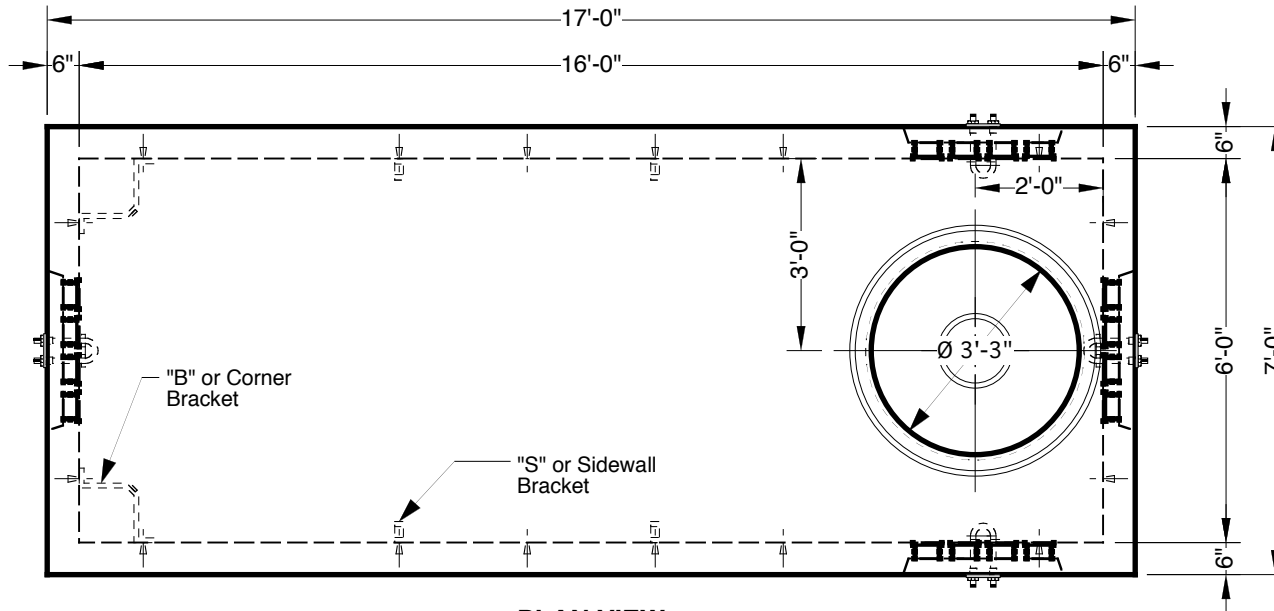


16' x 6' x 7' Type J Manhole

Advance Concrete Products Company

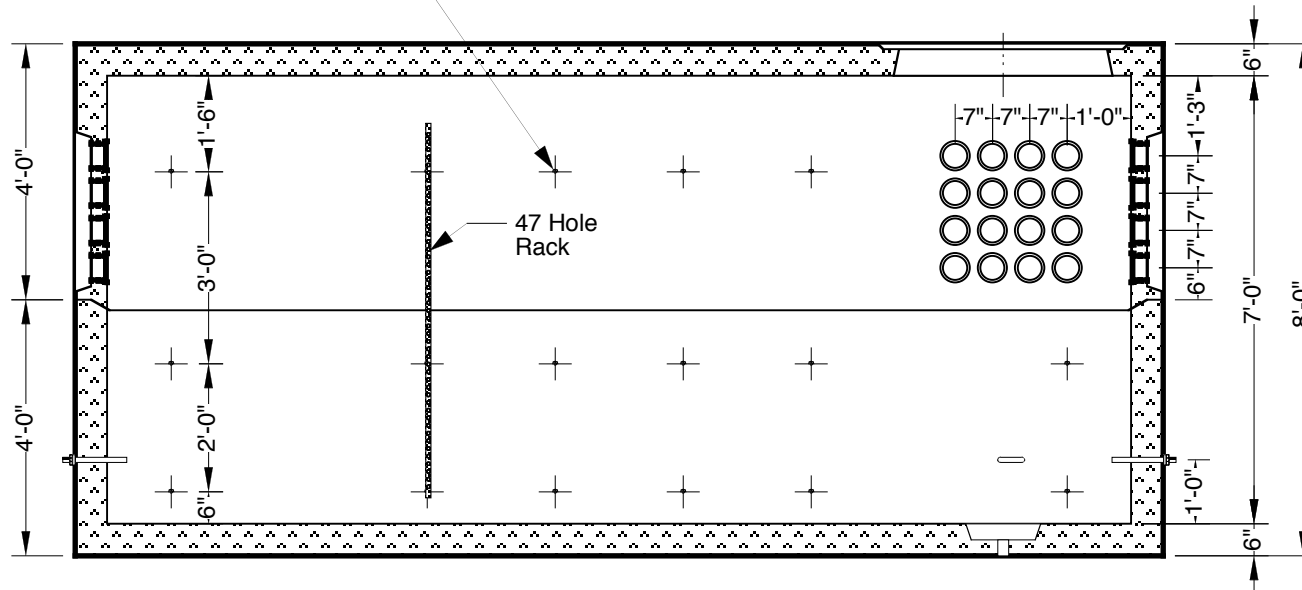


(800) 824-8351 (248) 887-4173 Fax: (248) 887-2755



PLAN VIEW

Ø1/2" Threaded Embedded Inserts in Walls



SECTION VIEW

All Concrete Shall Have A 28 Day Compressive Strength Of 4500 PSI.
Reinforcing Steel Shall Comply With ASTM A615 Grade 60 Rebar.
Bar Bending And Placement Shall Comply With The Latest ACI Standards.
Standard Structural Design Based On AASHTO HS 20 Wheel Loading.

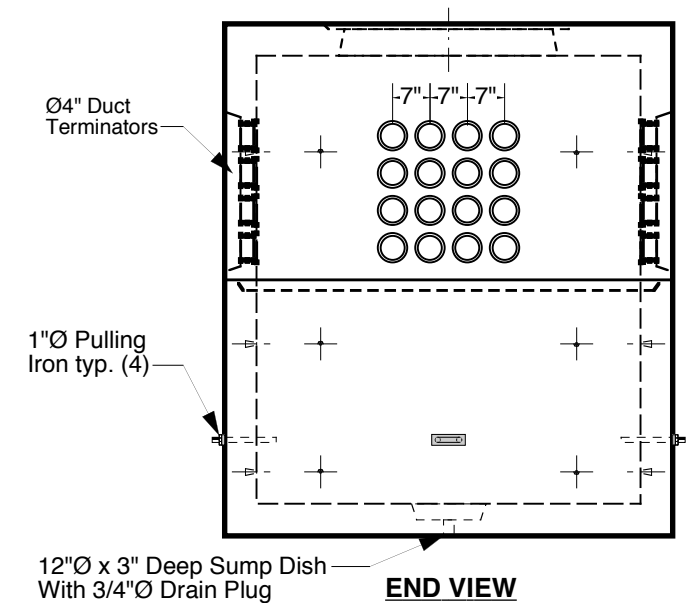
-Optional Galvanized Steel Hardware Package-

"S" Brackets	24
"B" Brackets	8
47 Hole Racks	12
1/2" X 13 X 1 1/4" Bolts	40
1/2" X 13 Nuts	40
1/2" X 13 X 1 3/4" Bolts	64
8'-0" Hooked Ladder	1

1" Ø Butyl Rubber Rope Mastic Is Provided For Placement Between Top And Bottom Sections Of Vault.

6", 12", & 24" High Grade Adjustment Rings Available

Approximate Weight Total: ± 41,900 Lbs.
Bottom Section : ± 21,200 Lbs. Top Section: ± 20,700 Lbs.



END VIEW