



December 19, 2010

## PERENNIAL HIGH INERTIA SECURITY PLANTERS

### GUIDELINES FOR USE

ANTI-RAM PLANTERS are an effective means for improving perimeter security against car or truck bombs by increasing the stand-off distance between the explosive device and the target.

Perennial Planters are constructed with 18 inch thick concrete bases and 6 inch thick side walls. Cast in smooth steel forms, a high quality finish is achieved. The flat base increases surface area to maximize friction against sliding when placed upon a concrete surface, which is the most common method of deployment. The six inch thick side walls are as thick as traffic barriers.

Faddis Concrete Products commissioned an engineering study to estimate the penetration of a vehicle of given mass and speed impacting upon a planter of a given mass assumed to be resting upon a level concrete surface. We have used the Department of State criteria and extended the criteria to a lighter vehicle and lower speeds. We have recently applied the new ASTM F 2656-07 criteria to the engineering formulas to determine estimated vehicle penetration distances.

The data clearly show that Perennial planters are most effective when vehicle speed at impact is minimized. Measures should be taken to reduce vehicle speed upon approach to the security perimeter through use of stop signs, traffic barriers, and traffic calming schemes. Vehicles that do not obey speed limits and traffic controls should be identified before they reach the perimeter.

Enhancement of the penetration resistance of the planter can be achieved by embedding a precast footing with pipe bollard extending up through the base of the planter. Faddis will develop details for this configuration upon request.

Faddis Concrete Products can provide color matched acrylic surface stains, or patterned surfaces, such as simulated stone or brick banding.

FADDIS CONCRETE PRODUCTS  
**PERENNIAL**  
**ANTI-RAM SECURITY PLANTERS**  
performance calculations per ASTM F-2656-07  
**ENGINEER RATED, NOT CRASH TESTED**

16-Aug-12

**An Explanation of Terms and Metrics**

**Concept:** Perimeter Security devices are designed to limit vehicles to a safe distance from a building. The minimum distance is determined by the threat assessment based upon the blast resistance of the facility and the importance of the facility. Vehicles are divided into sizes based upon weight (mass) and categorized by the speed at impact. The mass times speed determines the kinetic energy that must be resisted by the crash resistant device. The crash resistant device is then rated by the distance that a vehicle of given mass and speed will penetrate the through the device beyond the secure perimeter.

**Calculations:** Given a certain vehicle mass and speed, the kinetic energy of a vehicle at impact with a planter can be calculated. The result of a collision assumes that the vehicle loses the power of its motor upon impact and the distance the vehicle moves beyond impact assumes a frictional coefficient between the planter and the concrete surface where the planter is at rest. Faddis Perennial Planters are engineer rated and are non-crash rated.

**Crash Rating:** Devices may be physically tested to determine crash rating. Faddis Perennial Planters are not crash tested.

**Ratings History:** The Department of State in SD-STD-2.01, April 1985 established standard speed ratings 'K' for arresting 15,000 pound vehicles to a full stop. The Department of Defense in DOS SD-STD-02.01, Rev. A, March 2003 added penetration ratings 'L' to account for barriers that did not bring the vehicle to a full stop. ASTM F 2656-07 issued in 2007 categorized vehicle sizes: car (C = 2430 lbs), pickup truck (PU = 5070 lbs), medium duty truck (M = 15,000 lbs) and Heavy Goods vehicle (H = 65000 lbs), categorized speed of vehicles at 10 mph intervals from 30 to 60 mph, and established penetration criteria of: P1 <= 1 meter, 1m<= P2 <=7m , 7m< P3 <= 30m, P4 > 30m.

**Example:** A rating of PU60 P1 describes a barrier that arrests a pickup truck travelling at 60 mph to a penetration of the truck to less than 1 meter (3 feet 4 inches).

**Deployment:** Standard precast traffic safety barriers and traffic calming devices such as speed bumps and curves or turns in roadways may be used to slow vehicle speed as it approaches the building's secure perimeter. This layered approach reduces the kinetic energy of a vehicle at impact. The layout of the approach roads may be configured to exclude Medium or Heavy trucks from access to sensitive areas of buildings. The perimeter may be configured to direct delivery trucks to hardened areas of a building or where personnel are not exposed to a potential blast. If additional penetration resistance is desired, planters may be cast with a sleeve and connected to embedded steel pipes, or used as low height retaining walls to create an elevation change in the ground surface.

# FADDIS CONCRETE PRODUCTS

31-Jan-12

## PERENNIAL

### ANTI-RAM SECURITY PLANTERS

performance calculations per ASTM F-2656-07

ENGINEER RATED, NOT CRASH TESTED

### ESTIMATED PERFORMANCE SUMMARY

Faddis Perennial Planters		PASSENGER CAR		
Model Number	Shape Size			
R24	RECTANGULAR 24" X 48" X 36" TALL	C40 P3	C50P3	C60P3
S4	SQUARE 48" X 48" X 36" TALL	C40 P2	C50P2	C60P3
C4	CYLINDER 48" DIAMETER X 36" TALL	C40 P2	C50P3	C60P3
C5	CYLINDER 60" DIAMETER X 36" TALL	C40 P2	C50P2	C60P2

Faddis Perennial Planters		PICKUP TRUCK		
Model Number	Shape Size			
R24	RECTANGULAR 24" X 48" X 36" TALL	PU40 P4	PU50 P4	PU60 P4
S4	SQUARE 48" X 48" X 36" TALL	PU40 P3	PU50 P3	PU60 P3
C4	CYLINDER 48" DIAMETER X 36" TALL	PU40 P3	PU50 P3	PU60 P4
C5	CYLINDER 60" DIAMETER X 36" TALL	PU40 P3	PU50 P3	PU60 P3

Faddis Perennial Planters		MEDIUM TRUCK		
Model Number	Shape Size			
R24	RECTANGULAR 24" X 48" X 36" TALL	M30 P4	M40 P4	M50 P4
S4	SQUARE 48" X 48" X 36" TALL	M30 P4	M40 P4	M50 P4
C4	CYLINDER 48" DIAMETER X 36" TALL	M30 P4	M40 P4	M50 P4
C5	CYLINDER 60" DIAMETER X 36" TALL	M30 P3	M40 P4	M50 P4

Faddis Perennial Planters		HEAVY GOODS TRUCK		
Model Number	Shape Size			
R24	RECTANGULAR 24" X 48" X 36" TALL	NOT RATED		
S4	SQUARE 48" X 48" X 36" TALL			
C4	CYLINDER 48" DIAMETER X 36" TALL			
C5	CYLINDER 60" DIAMETER X 36" TALL			

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## PERENNIAL

### ANTI-RAM SECURITY PLANTERS

performance calculations per ASTM F-2656-07

ENGINEER RATED, NOT CRASH TESTED

ESTIMATED PERFORMANCE USING DOS CRITERIA - 2430 POUND VEHICLE - PASSENGER CAR

#### Assumptions:

1. The collision is perfectly plastic.
2. The vehicle and the planter will move as one mass after the collision takes place.
3. No additional energy will be added to the system after the collision takes place. (Vehicle is disabled at impact)
4. The planter will maintain contact with the ground
5. Soil Weight 100 pcf

#### Threat Assessment Criteria

#### 2430 pound Vehicle - PASSENGER CAR - 40, 50 or 60 mph

Condition Designation	Impact Conditions
C40	Vehicle Mass 2,430 pounds, Impact Speed 40 mph, Kinetic Energy 131 ft-kips
C50	Vehicle Mass 2,430 pounds, Impact Speed 50 mph, Kinetic Energy 205 ft-kips
C60	Vehicle Mass 2,430 pounds, Impact Speed 60 mph, Kinetic Energy 295 ft-kips

Performance Level	Crash Test Assessment
P1	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1 m, (3.3 feet) are permitted
P2	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1.01 - 7m (3.31 to 23 ft) are permitted
P3	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 7.01 - 30m (23.1 to 98.4 ft) are permitted
P4	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of 30m (98.4 ft) or greater

Model Number	Faddis Perennial Planters Shape Size	Mass, pounds <b>filled</b>	Vehicle		Kinetic Energy FT/LBS	Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	2430	40	131000	37 (P3)
S4	SQUARE 48" X 48" X 36" TALL	6300	2430	40	131000	13 (P2)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	2430	40	131000	19 (P2)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	2430	40	131000	9 (P2)

Model Number	Faddis Perennial Planters Shape Size	Mass, pounds <b>filled</b>	Vehicle		Kinetic Energy FT/LBS	Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	2430	50	205000	58 (P3)
S4	SQUARE 48" X 48" X 36" TALL	6300	2430	50	205000	20 (P2)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	2430	50	205000	30 (P3)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	2430	50	205000	14 (P2)

Model Number	Faddis Perennial Planters Shape Size	Mass, pounds <b>filled</b>	Vehicle		Kinetic Energy FT/LBS	Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	2430	60	295000	84 (P3)
S4	SQUARE 48" X 48" X 36" TALL	6300	2430	60	295000	29 (P3)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	2430	60	295000	43 (P3)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	2430	60	295000	21 (P2)

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**ANTI-RAM SECURITY PLANTERS**

performance calculations per ASTM F-2656-07

**ENGINEER RATED, NOT CRASH TESTED**

ESTIMATED PERFORMANCE USING DOS CRITERIA - 5070 POUND VEHICLE - PICKUP TRUCK

**Assumptions:**

1. The collision is perfectly plastic.
2. The vehicle and the planter will move as one mass after the collision takes place.
3. No additional energy will be added to the system after the collision takes place. (Vehicle is disabled at impact)
4. The planter will maintain contact with the ground
5. Soil Weight 100 pcf

**Threat Assessment Criteria**

**5070 pound Vehicle - Pickup Truck - 40, 50 or 60 mph**

Condition Designation	Impact Conditions
PU40	Vehicle Mass 5,070 pounds, Impact Speed 40 mph, Kinetic Energy 273 ft-kips
PU50	Vehicle Mass 5,070 pounds, Impact Speed 50 mph, Kinetic Energy 426 ft-kips
PU60	Vehicle Mass 5,070 pounds, Impact Speed 60 mph, Kinetic Energy 613 ft-kips

Performance Level	Crash Test Assessment
P1	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1 m, (3.3 feet) are permitted
P2	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1.01 - 7m (3.31 to 23 ft) are permitted
P3	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 7.01 - 30m (23.1 to 98.4 ft) are permitted
P4	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of 30m (98.4 ft) or greater

Faddis Perennial Planters					Assumptions:	
Model Number	Shape Size	Mass, pounds filled	Vehicle		Kinetic Energy FT/LBS	coeff. of friction 0.45 not embedded stopping distance FT
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	5070	40	273000	111 (P4)
S4	SQUARE 48" X 48" X 36" TALL	6300	5070	40	273000	43 (P3)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	5070	40	273000	61 (P3)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	5070	40	273000	31 (P3)

Faddis Perennial Planters					Assumptions: coeff. of friction 0.45 not embedded stopping distance FT	
Model Number	Shape Size	Mass, pounds	Vehicle		Kinetic Energy	
		filled	5070	velocity MPH	FT/LBS	
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	5070	50	426000	173 (P4)
S4	SQUARE 48" X 48" X 36" TALL	6300	5070	50	426000	67 (P3)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	5070	50	426000	95 (P3)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	5070	50	426000	49 (P3)

Faddis Perennial Planters					Assumptions: coeff. of friction 0.45 not embedded stopping distance FT	
Model Number	Shape Size	Mass, pounds filled	Vehicle			Kinetic Energy
			mass LB	velocity MPH		FT/LBS
		R24	RECTANGULAR 24" X 48" X 36" TALL	3300		5070
S4	SQUARE 48" X 48" X 36" TALL	6300	5070	60	613000	96 (P3)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	5070	60	613000	137 (P4)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	5070	60	613000	70 (P3)

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## PERENNIAL

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### ANTI-RAM SECURITY PLANTERS

performance calculations per ASTM F-2656-07

ENGINEER RATED, NOT CRASH TESTED

ESTIMATED PERFORMANCE USING DOS CRITERIA - 15000 POUND VEHICLE - MEDIUM DUTY TRUCK

#### Assumptions:

1. The collision is perfectly plastic.
2. The vehicle and the planter will move as one mass after the collision takes place.
3. No additional energy will be added to the system after the collision takes place. (Vehicle is disabled at impact)
4. The planter will maintain contact with the ground
5. Soil Weight 100 pcf

#### Department of State Assessment Criteria

15000 pound Vehicle - MEDIUM DUTY TRUCK- 30, 40 or 50 mph

Condition Designation	Impact Conditions
M30	Vehicle Mass 15,000 pounds, Impact Speed 30 mph, Kinetic Energy 451 ft-kips
M40	Vehicle Mass 15,000 pounds, Impact Speed 40 mph, Kinetic Energy 802 ft-kips
M50	Vehicle Mass 15,000 pounds, Impact Speed 50 mph, Kinetic Energy 1,250 ft-kips

Performance Level	Crash Test Assessment
P1	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1 m, (3.3 feet) are permitted
P2	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1.01 - 7m (3.31 to 23 ft) are permitted
P3	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 7.01 - 30m (23.1 to 98.4 ft) are permitted
P4	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of 30m (98.4 ft) or greater

Model Number	Faddis Perennial Planters Shape Size	M30			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
		Mass, pounds	Vehicle	Kinetic Energy	
		<b>filled</b>	mass LB velocity MPH	FT/LBS	
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	15000 30	451,000	248 (P4)
S4	SQUARE 48" X 48" X 36" TALL	6300	15000 30	451,000	112 (P4)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	15000 30	451,000	150 (P4)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	15000 30	451,000	86 (P3)

Model Number	Faddis Perennial Planters Shape Size	M40			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
		Mass, pounds	Vehicle	Kinetic Energy	
		<b>filled</b>	mass LB velocity MPH	FT/LBS	
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	15000 40	802000	443 (P4)
S4	SQUARE 48" X 48" X 36" TALL	6300	15000 40	802000	200 (P4)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	15000 40	802000	267 (P4)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	15000 40	802000	153 (P4)

Model Number	Faddis Perennial Planters Shape Size	M50			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT
		Mass, pounds	Vehicle	Kinetic Energy	
		<b>filled</b>	mass LB velocity MPH	FT/LBS	
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	15000 50	1250000	691 (P4)
S4	SQUARE 48" X 48" X 36" TALL	6300	15000 50	1250000	312 (P4)
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	15000 50	1250000	417 (P4)
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	15000 50	1250000	239 (P4)

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**ANTI-RAM SECURITY PLANTERS**

performance calculations per ASTM F-2656-07

**ENGINEER RATED, NOT CRASH TESTED**

ESTIMATED PERFORMANCE USING DOS CRITERIA - 65000 POUND VEHICLE - HEAVY GOODS TRUCK

**Assumptions:**

1. The collision is perfectly plastic.
2. The vehicle and the planter will move as one mass after the collision takes place.
3. No additional energy will be added to the system after the collision takes place. (Vehicle is disabled at impact)
4. The planter will maintain contact with the ground
5. Soil Weight 100 pcf

**Department of State Assessment Criteria**  
**65000 pound Vehicle - HEAVY GOODS TRUCK- 30, 40 or 50 mph**

Condition Designation	Impact Conditions
H30	Vehicle Mass 65,000 pounds, Impact Speed 30 mph, Kinetic Energy 1950 ft-kips
H40	Vehicle Mass 65,000 pounds, Impact Speed 40 mph, Kinetic Energy 3470 ft-kips
H50	Vehicle Mass 65,000 pounds, Impact Speed 50 mph, Kinetic Energy 5430 ft-kips

Performance Level	Crash Test Assessment
P1	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1 m, (3.3 feet) are permitted
P2	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 1.01 - 7m (3.31 to 23 ft) are permitted
P3	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of up to 7.01 - 30m (23.1 to 98.4 ft) are permitted
P4	Vehicle and Cargo are to be stopped although vehicle partial penetration and/or barrier deflection of 30m (98.4 ft) or greater

Faddis Perennial Planters		M30			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT	
Model	Shape	mass, pound	Vehicle			Kinetic Energy
Number	Size	filled	mass LB	velocity MPH		FT/LBS
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	65000	30		1,950,000
S4	SQUARE 48" X 48" X 36" TALL	6300	65000	30	1,950,000	NOT RATED
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	65000	30	1,950,000	
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	65000	30	1,950,000	

Model Number	Faddis Perennial Planters	M40			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT	
		mass, pound <b>filled</b>	Vehicle			Kinetic Energy
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	65000	40	3470000	NOT RATED
S4	SQUARE 48" X 48" X 36" TALL	6300	65000	40	3470000	
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	65000	40	3470000	
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	65000	40	3470000	

Model Number	Faddis Perennial Planters Shape Size	M50			Assumptions: coeff. of friction 0.45 not embedded stopping distance FT	
		mass, pounds <b>filled</b>	Vehicle			Kinetic Energy
			mass LB	velocity MPH		
R24	RECTANGULAR 24" X 48" X 36" TALL	3300	65000	50	5430000	NOT RATED
S4	SQUARE 48" X 48" X 36" TALL	6300	65000	50	5430000	
C4	CYLINDER 48" DIAMETER X 36" TALL	5000	65000	50	5430000	
C5	CYLINDER 60" DIAMETER X 36" TALL	7700	65000	50	5430000	



**PERENNIAL HIGH INERTIA SECURITY PLANTERS**

60" OUTSIDE DIAMETER CYLINDER SECURITY PLANTER  
6" THICK SIDE WALLS, 18" THICK CONCRETE BASE  
36" TOTAL HEIGHT  
WEIGHT 5,800 POUNDS EMPTY  
WEIGHT 7,700 POUNDS FILLED WITH 100 PCF FILL  
1" DIAMETER DRAIN HOLE IN BOTTOM  
4,000 PSI CONCRETE, FIBER REINFORCED  
SMOOTH STEEL FORM FINISH  
NATURAL GRAY CONCRETE  
OPTIONAL SURFACE APPLIED ACRYLIC STAIN  
OPTIONAL EXPOSED AGGREGATE FINISH



PLANTERS ARE CAST WITH A LIFTING INSERT IN THE CENTER OF THE BOWL. UPON REQUEST, A LIFTING DEVICE CAN BE SUPPLIED FOR AN ADDITIONAL \$250.00. IF THE LIFTING DEVICE IS RETURNED TO Faddis Concrete Products, THE INVOICE WILL BE CREDITED. THE INSTALLER IS RESPONSIBLE FOR PROVIDING A SHACKLE AND CABLE OR CHAIN TO HOOK TO A CRANE FOR LIFTING. PLANTER BOTTOM IS SMOOTH TO MAXIMIZE FRICTION AGAINST SLIDING UPON IMPACT. TO MOVE WITH FORKLIFT AFTER PLACEMENT, IT IS NECESSARY TO RAISE ONE EDGE PROVIDING ACCESS FOR FORKLIFT TINES.

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### PERENNIAL HIGH INERTIA SECURITY PLANTERS

48" SQUARE OUTSIDE DIMENSION SECURITY PLANTER  
6" THICK SIDE WALLS, 18" THICK CONCRETE BASE  
36" TOTAL HEIGHT  
WEIGHT 4,000 POUNDS EMPTY  
WEIGHT 5,000 POUNDS FILLED WITH 100 PCF FILL  
1" DIAMETER DRAIN HOLE IN BOTTOM  
4,000 PSI CONCRETE, FIBER REINFORCED  
SMOOTH STEEL FORM FINISH  
NATURAL GRAY CONCRETE  
OPTIONAL SURFACE APPLIED ACRYLIC STAIN  
OPTIONAL EXPOSED AGGREGATE FINISH



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[www.faddis.com](http://www.faddis.com)

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**PERENNIAL HIGH INERTIAL SECURITY PLANTERS**

48" OUTSIDE DIAMETER CYLINDER SECURITY PLANTER  
6" THICK SIDE WALLS, 18" THICK CONCRETE BASE  
36" TOTAL HEIGHT  
WEIGHT 4,000 POUNDS EMPTY  
WEIGHT 5,000 POUNDS FILLED WITH 100 PCF FILL  
1" DIAMETER DRAIN HOLE IN BOTTOM  
4,000 PSI CONCRETE, FIBER REINFORCED  
SMOOTH STEEL FORM FINISH  
NATURAL GRAY CONCRETE  
OPTIONAL SURFACE APPLIED ACRYLIC STAIN  
OPTIONAL EXPOSED AGGREGATE FINISH



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[www.faddis.com](http://www.faddis.com)

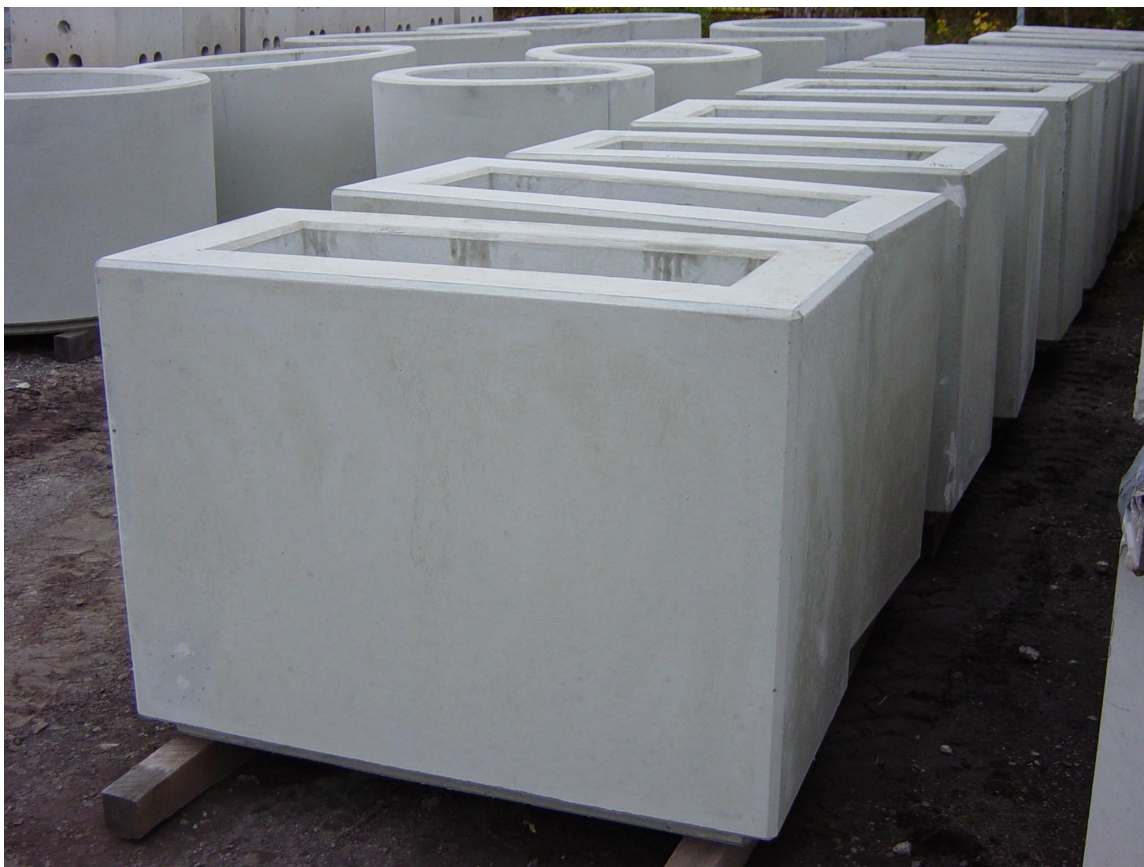
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**PERENNIAL HIGH INERTIA SECURITY PLANTERS**

24 X 48" RECTANGULAR OD SECURITY PLANTER  
6" THICK SIDE WALLS, 18" THICK CONCRETE BASE  
36" TOTAL HEIGHT  
WEIGHT 2,800 POUNDS EMPTY  
WEIGHT 3,300 POUNDS FILLED WITH 100 PCF FILL  
1" DIAMETER DRAIN HOLE IN BOTTOM  
4,000 PSI CONCRETE, FIBER REINFORCED  
SMOOTH STEEL FORM FINISH  
NATURAL GRAY CONCRETE  
OPTIONAL SURFACE APPLIED ACRYLIC STAIN  
OPTIONAL EXPOSED AGGREGATE FINISH



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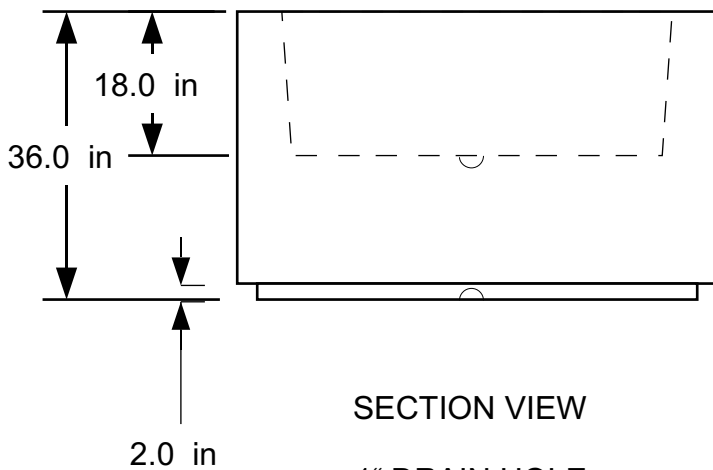
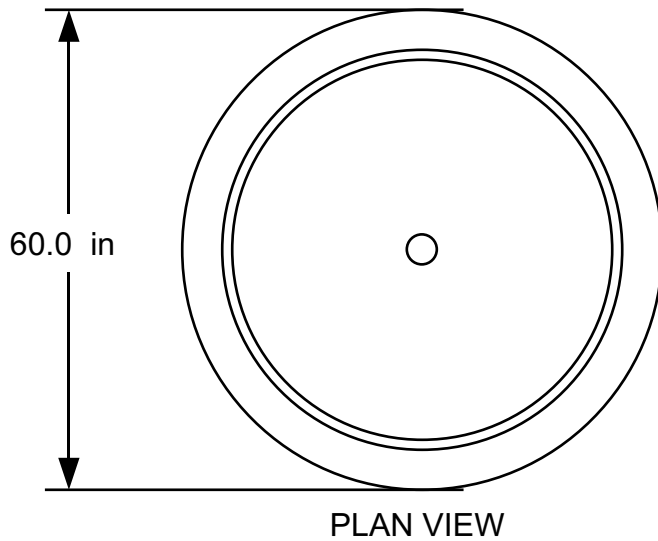
[www.faddis.com](http://www.faddis.com)

email: [info@faddis.com](mailto:info@faddis.com)

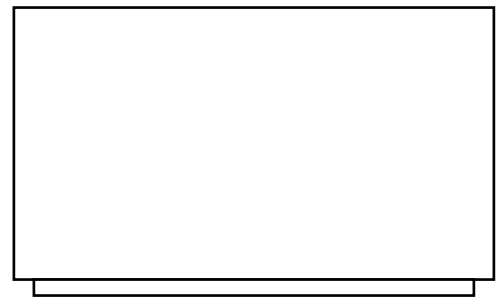


# FADDIS SECURITY PLANTERS

## CYLINDER - MODEL C5



1" DRAIN HOLE  
NOT SHOWN



### FINISH OPTIONS:

INTEGRAL COLOR  
ACRYLIC STAIN COLOR  
EXPOSED AGGREGATE  
SANDBLASTED  
WEIGHT: APPROX. 5,800 LB  
FILLED: APPROX. 7,700 LB

REV.	DATE

SUBJECT TO REVISION WITHOUT NOTICE

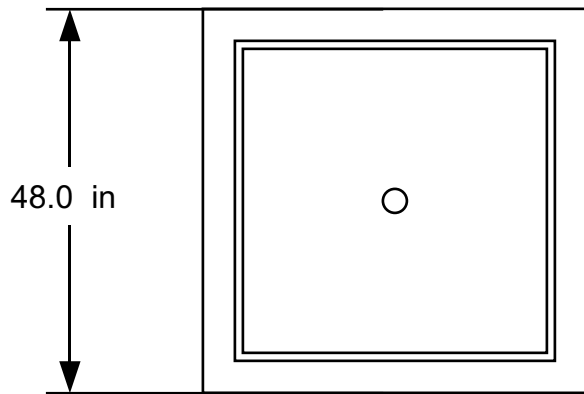
NOT TO SCALE

**FADDIS CONCRETE PRODUCTS**  
3515 Kings Highway  
Downingtown, PA 19335  
(610) 269-4685 (610) 873-8431 FAX

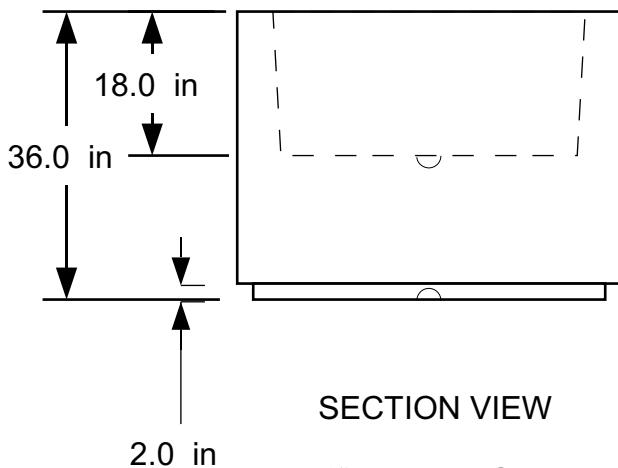
FADDIS SECURITY PLANTER

DWG #. PC6036 DATE:JUI 12, 2002

# FADDIS PERENNIAL SECURITY PLANTERS SQUARE 48" - MODEL S4



PLAN VIEW



SECTION VIEW

1" DRAIN HOLE  
(NOT SHOWN)



ELEVATION VIEW

## FINISH OPTIONS:

INTEGRAL COLOR  
ACRYLIC STAIN COLOR  
EXPOSED AGGREGATE  
SANDBLASTED  
WEIGHT: APPROX. 5,000 LB  
FILLED: APPROX. 6,300 LB

REV.	DATE

SUBJECT TO REVISION WITHOUT NOTICE

NOT TO SCALE

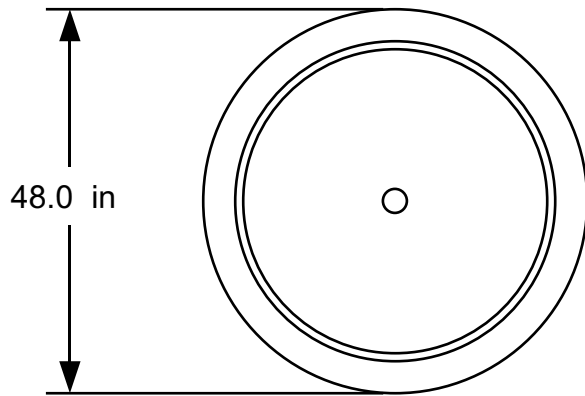
**FADDIS CONCRETE PRODUCTS**  
3515 Kings Highway  
Downingtown, PA 19335  
(610) 269-4685 (610) 873-8431 FAX

FADDIS SECURITY PLANTER

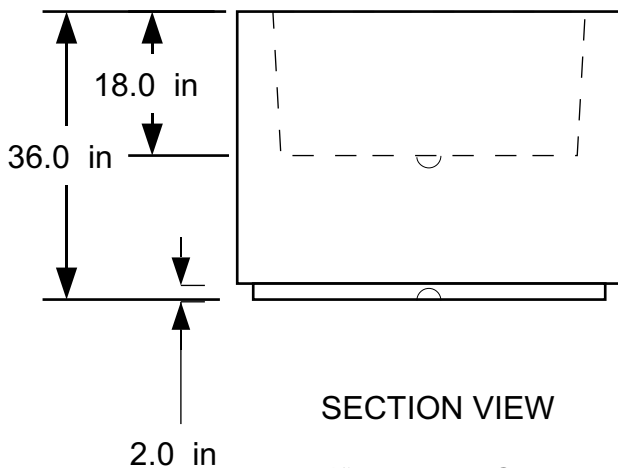
DWG #. PRV4836 DATE:AUG 8, 2002

# FADDIS SECURITY PLANTERS

## CYLINDER - MODEL C4

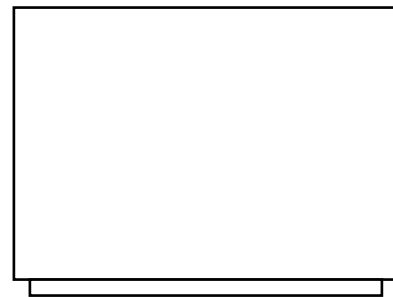


PLAN VIEW



SECTION VIEW

1" DRAIN HOLE  
NOT SHOWN



ELEVATION VIEW

### FINISH OPTIONS:

INTEGRAL COLOR  
ACRYLIC STAIN COLOR  
EXPOSED AGGREGATE  
SANDBLASTED  
WEIGHT: APPROX. 4,000 LB  
FILLED: APPROX. 5,000 LB

REV.	DATE

SUBJECT TO REVISION WITHOUT NOTICE

NOT TO SCALE

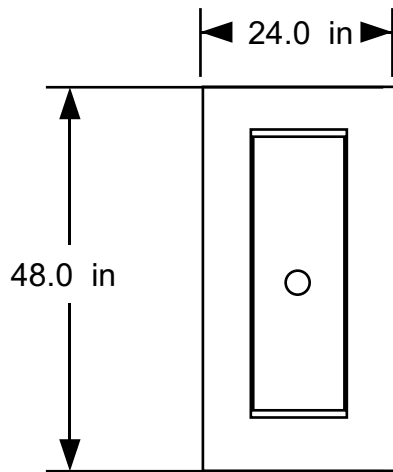
**FADDIS CONCRETE PRODUCTS**  
3515 Kings Highway  
Downingtown, PA 19335  
(610) 269-4685 (610) 873-8431 FAX

FADDIS SECURITY PLANTER

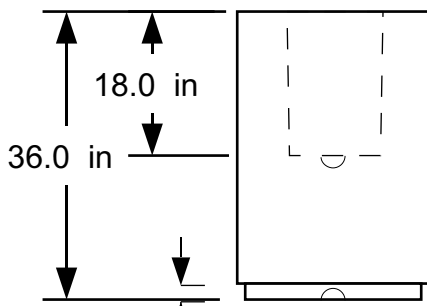
DWG #. PC4836 DATE: JUN 10, 2002

# FADDIS SECURITY PLANTERS

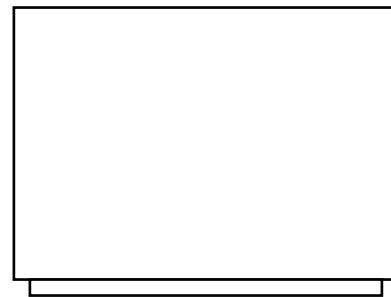
## 24" X 48" RECTANGLE - MODEL R24



PLAN VIEW



SECTION VIEW  
2.0 in  
DRAIN HOLE NOT SHOWN



ELEVATION VIEW

### FINISH OPTIONS:

INTEGRAL COLOR  
ACRYLIC STAIN COLOR  
EXPOSED AGGREGATE  
SANDBLASTED  
WEIGHT: APPROX. 2,900 LB  
FILLED: APPROX. 3,300 LB

REV.	DATE

SUBJECT TO REVISION WITHOUT NOTICE

NOT TO SCALE

**FADDIS CONCRETE PRODUCTS**  
3515 Kings Highway  
Downingtown, PA 19335  
(610) 269-4685 (610) 873-8431 FAX

FADDIS SECURITY PLANTER

DWG #. PR482436 DATE: OCT 11, 2002