



TECHNICAL REQUIREMENTS AND SPECIFICATIONS

PROJECT: Urb. Mansiones de Las Piedras Damage Repair

City: Las Piedras

Location: Latitude: 18.1919 Longitude: -65.87130

Project Num.: 87524 **PW:** 1863 **Damage Inventory:** 275569

Acquisition : Formal Bid

Proposal Solicitation: RFP

HON. RAY J. QUIÑONES VÁZQUEZ
SECRETARY
DRD- PUERTO RICO
HURRICANE MARIA DAMAGE RECONSTRUCTION



FEMA



Recovery, Reconstruction, Resiliency



Mansiones del Las Piedras Facility Damages Repair

Facility Damage – Chain Link Fence

- 1) Remove, dispose, supply and install chain link fence. Approximately 60 LF.

Facility Damage – Concrete Benches

- 1) Demolition and disposal of existing damaged concrete benches. Approximately 27 CY.
- 2) Supply and Install new pre-cast concrete benches. Three (3) EA. See specifications.

Facility Damage – Paint

- 1) Paint basketball court markings.
 - 2) Paint basketball goals.
 - 3) Paint all benches. (300 SF) Use exterior wall paint.
- Clean and patch all existing surfaces
 - Basketball Flooring: See Multisport Technical Specification. Use Acrylic Synthetic System equal or similar to Polysport System by OAFA.
 - Product Description:
 - a. Steel Structures: Similar or equal to Sherwin Williams Pro Industrial DTM Acrylic Primer/Finish. Apply two (2) coats.
 - b. Exterior Wall Paint: Similar or equal to Sherwin-Williams Quick Dry Interior/ Exterior Stain Blocking Primer. Apply One (1) coat. Of primer. A-100 Exterior acrylic Latex. Apply two (2) coats of paint.
 - c. Colors to be selected by owner.
 - d. The contractor is responsible to supply all necessary painting materials.

**Buy American Act Requirements:**

Buy American requirements apply to purchases of iron, steel, and other manufactured products permanently incorporated into infrastructure projects. To be considered as being produced in the U.S., goods must be manufactured in the U.S. and at least 50% of the cost of their components must come from the U.S.

Additional Notes:

- 1) The contractor shall visit the job site and become acquainted with the existing field conditions.
- 2) The contractor shall submit with the proposal, the proposed Synthetic Acrylic System specifications with the warranty terms and conditions. The system must be equal or similar to the specified and shall comply with a minimum of minimum five (5) year warranty, excluding damages by improper use and wear due to normal use.
- 3) The contractor is responsible to comply with all laws, regulations, codes, professional licenses required by Municipal, State, Federal and Local laws.
- 4) To all existing concrete surface (where occur) - All spalling concrete must be repair. Chip the existing loose concrete and treat the exposed rebar. Clean with a steel brush and apply (equal or similar) Loctite Extend Rust Neutralizer, apply (equal or similar) Sika Armatec – 110 EpoCem and then patch and finish the affected area with Vinyl Concrete Patch. For all product, follow the manufacturer mixing and application recommendations.
- 5) The word “Typical” or “Typ.”, “Standard Drawing” or “Std. DWG” and “where occur”, means whenever or wherever the mentioned or illustrated conditions happened, the note, detail or scope will apply.
- 6) All exterior concrete structure or item must be painted with exterior paint. (where occur).

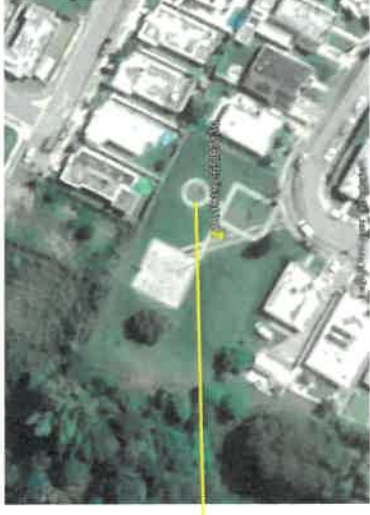
Damage Repairs – Mansiones de Las Piedras, Las Piedras

Scope of Work Reference

Coordinates: Latitude – 18.1919, Longitude: -65.87130



Replace Existing Concrete Benches:



- Replace existing and install new precast concrete benches. Paint all new and existing.

* See scope of work attached.

Basketball Court Repairs



- Existing court slab cleaning and making painting. Paint existing goal.

* See scope of work attached.

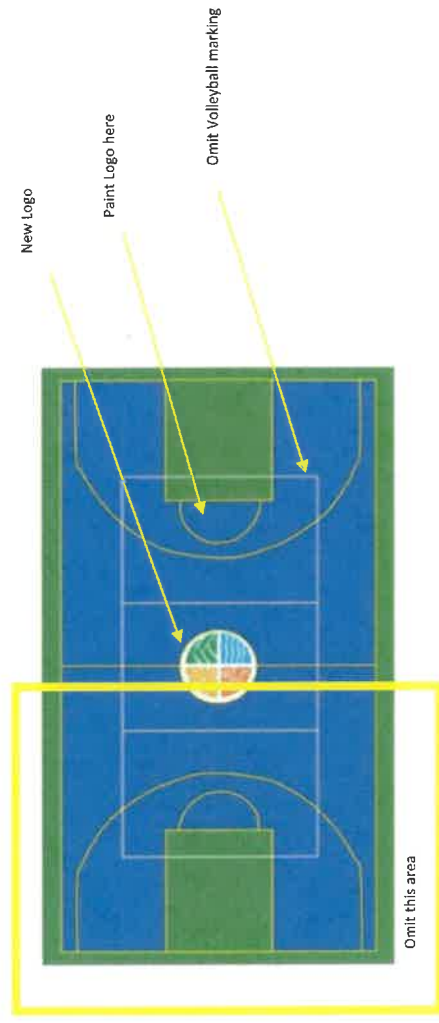
Replace existing chain link fence



- Replace existing 6 FT chain link fence section.

* See scope of work attached.

Half - Basketball Court Floor Paint Color



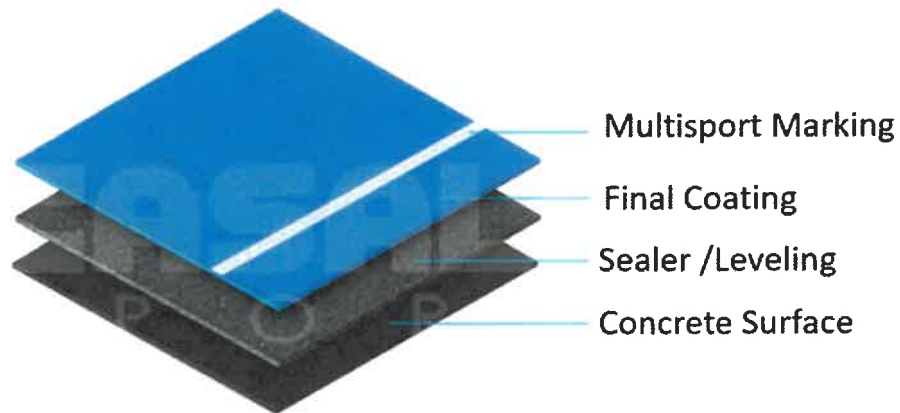
Color Pattern

- Logo Art will be provided by owner
- All line markings on the floor are 2 inches wide



Multisport Court Repair Scope of Work
Multisport Acrylic Synthetic Flooring System
Technical Specification

Basketball Court Surface Preparation



Acrylic Synthetic Sport Flooring System

***EQUAL OR SIMILAR TO POLYSPORT SYSTEM
BY OAFA***



1) Concrete surface preparation

- Remove existing surface paint with paint removal product.
- Product should be compatible with acrylic system product.
- Scarify existing concrete.
- Pressure washes existing scarified concrete surface to remove all remaining dust.
- Treat all concrete cracks with product compatible and recommended by system's manufacturer.
- Seal existing concrete surface applying a synthetic resin-based filler using an acrylic resin based coating containing select sands, in water emulsion, especially formulated to seal concrete surfaces. Be sure that the product is compatible and recommended by system's manufacturer.

CHARACTERISTICS OF THE LIQUID PRODUCT			
Characteristic	U.M.	Value	Tolerance
Specific weight	Kg/dm ³	1,64	± 0,1
Dry mass residue	%	75	± 3
Dry volume residue	%	59	± 3
Residue at 450°C	%	61	± 3
Brookfield viscosity (with Brookfield viscosimeter rotor no. 6, speed 10)	mPa·s	90000	± 5000
pH	-	8	± 1

- Surface must be sloped correctly to ensure rainwater runoff and prevent pooling.

2) Supply and apply Final Acrylic Coating System. Acrylic resin-based covering developed for multi-purpose sports flooring. The hard resin-based formula with UV ray resistant pigments and select sands that makes the ideal sports surfaces for many different games. Resin surfaces must be waterproof (non-draining).

CHARACTERISTICS OF THE LIQUID PRODUCT			
Characteristic	U.M.	Value	Tolerance
Specific weight	Kg/dm ³	1,7	± 0,1
Dry mass residue	%	76	± 3
Dry volume residue	%	60	± 3
Residue at 450°C	%	65	± 3
Brookfield viscosity (with Brookfield viscosimeter rotor no. 6, speed 3)	mPa·s	240000	± 12000
pH	-	8	± 1



- Coverage as recommended by manufacturer.
- Ductile and resistant to abrasion
- Weather Resistant
- Maintenance Free
- Always available to play even when a heavy rain or hot weather have occurred.

3) Basketball court marking – use a highly covering acrylic paint, especially developed to mark field (2") lines on acrylic surfaces.

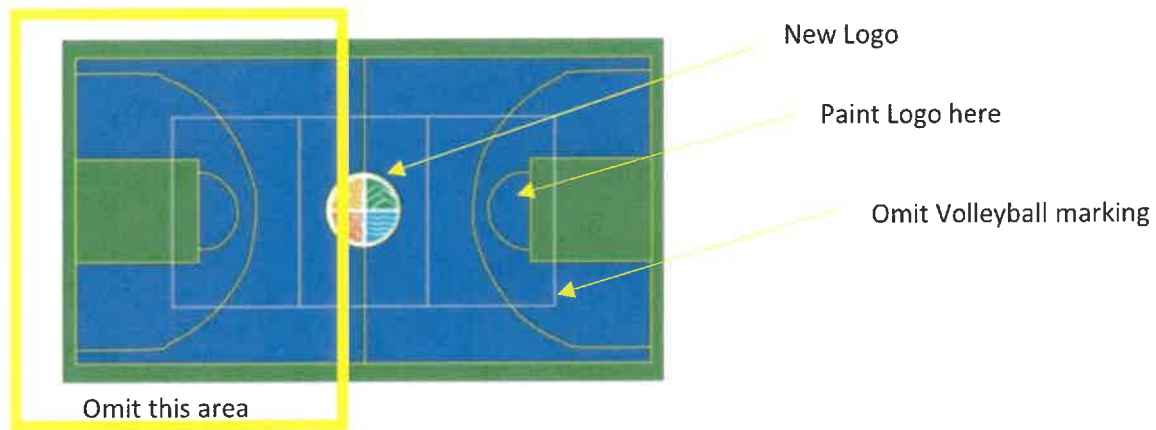
CHARACTERISTICS OF THE LIQUID PRODUCT			
Characteristic	U.M.	Value	Tolerance
Specific weight	Kg/dm ³	1,38	± 0,1
Dry mass residue	%	54	± 0,5
Dry volume residue	%	36	± 0,5
Residue at 450°C	%	37	± 0,5
Brookfield viscosity (with Brookfield viscosimeter rotor no. 6. speed 5)	mPa·s	23000	± 2000
pH	-	9	± 1

- See typical color pattern
- See basketball court layout.

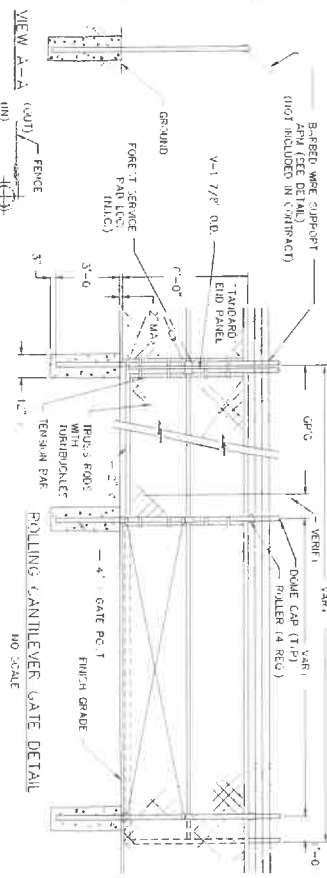
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Half - Basketball Court Floor Paint Color

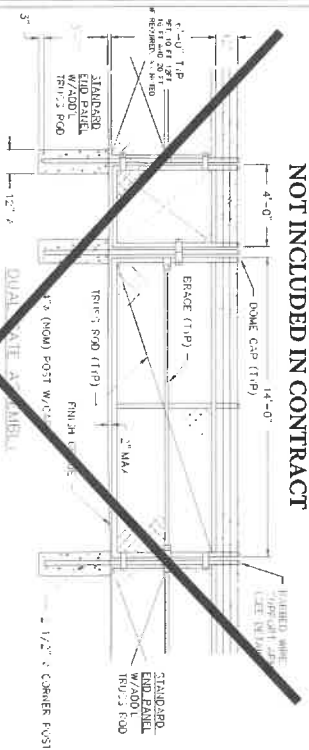


- Logo Art will be provided by owner
- All line markings on the floor are 2 inches wide

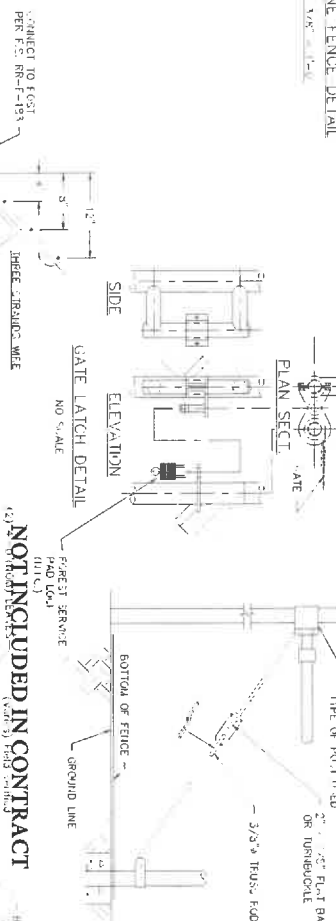


NAME:

CORNER OR END PANEL ASSY.
PULL POST ASSY. (EXCEPT AS INDICATED)
 $\Delta \text{ALF} = \Delta \beta = 1^\circ \text{UT}$
NOT INCLUDED IN CONTRACT

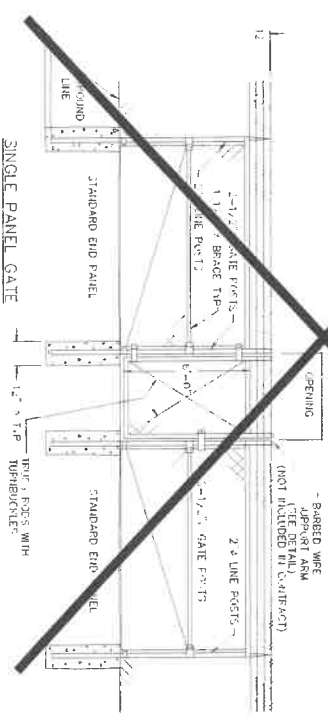


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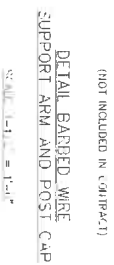


NO SCALE

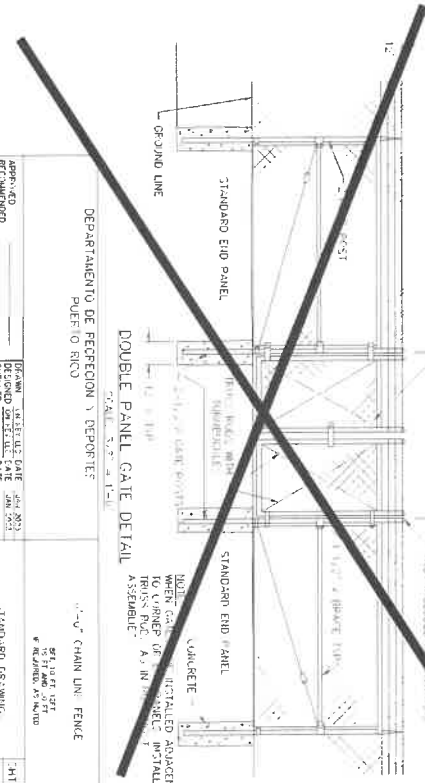
NOT INCLUDED IN CONTRACT
 (2) $\frac{2}{0} = \frac{0}{0}$ LEVATES
 (Value's) Field : pathus



DETAIL BARBED WIRE



DOUBLE PANEL GATE DETAIL



CHAIN LIN: FENCE

NOTE.
ALL FOOTING CONCRETE MUST BE 3,000 PSI

$$\frac{d^2 M}{d\tau^2} = 1.21 \times 10^{-10}$$

APPROVED		DATE	JUN 07 2001
RECOMMENDED		DESIGNED FOR RELEASE DATE	JUN 07 2001
		CHECKED	DATE
		REVIEWED	DATE

TANDARO DEWING

MT.	1
OF	2

GENERAL NOTES

NOTES:

- 1- In activities that backfill is required the contractor must use A-2-4 or similar compacted in layers of 6" inches thickness at 95% and been verified by laboratory tests, which will be paid by the contractor.
2. All document included in this bidding process are part of the contract.
3. The contractor shall connect the structure to the existing water and sewer connection services of the site if it where not connected.
4. Demolition and construction disposal will be contractor's responsibility.
5. The contractor will be responsible to implement Plan CEST, PFE (Permiso de Fuente de Emision) and DS3 (Desperdicios Solidos no Peligrosos) as required by the Junta de Calidad Ambiental. (If required)
6. The contractor shall maintained the site clean and free of debris during work in progress.
7. A boundary shall be identified on field to isolated the construction area from the areas that are not impacted. The limit will be defined using a temporary fence that must be provided by the contractor.
8. The contractor will be responsible for all the demolition and debris disposal during the construction. Everything must be coordinated with the Consultant including any foundation demolition if it where the case.
9. "The contractor will plant Soisa Meyer grass in tight squares in all the Green areas affected by the construction.
10. All site dimensions must be verified on site by the contractor.
11. The contractor shall be responsible for any damage cause by the contractor or his employee to the existing infrastructure on the field.
12. All sidewalks finishes shall be broom finish.
13. The contractor shall be familiarized with the existing site conditions before the bidding.
14. The construction site perimeter will be protected with a temporary fence.
15. The contractor will submit a work plan in addition to the cost breakdown for payment for owner's Consultant approval.
16. If applicable any slopes that are generated on the site will not have a slope greater than 1:1 and shall be duly stabilized with Jute or a Similar approved geotextile product and Soysa Meyer grass will be tightly installed for permanent stabilization.
17. The contractor Will familiarize himself with the included Electrical and structural notes and specifications where applicable.

Bid Documents for
Method of Repair (MOR)

SEAL

SIGNATURE

DEPARTAMENTO DE RECREACIÓN Y DEPORTES (DRD)

PUERTO RICO

PROJECT NAME:

DATE: July 15, 2020

REVISIONS: 03

DRAWN BY:

Miranda Rodriguez

SCALE: N/A

SHEET NAME:

GENERAL NOTES

PAINT NOTES

1 ALL INTERIOR AND EXTERIOR WALLS SHALL BE PAINTED WITH THREE COATS OF PAINT. THE INTERIOR THREE COAT SYSTEM CONSISTS OF A SEALER PRIMER COAT AND TWO FINISH COATS WITH 100 % ACRYLIC LATEX PAINT, EGGSHELL FINISH. EXTERIOR THREE COAT SYSTEM CONSISTS OF A QUICK DRY STAIN BLOPER AND SEALER PRIMER AND TWO FINISH COAT OF 100% ACRYLIC PAINT. COLOR TO BE SELECTED BY THE ENGINEER. PATCH AND REPAIR WITH CONCRETE PLASTER ALL SURFACE IF NECESSARY, BEFORE PAINT.

2 ITEMS NOT TO BE PAINTED WHICH ARE IN CONTACT WITH OR ADJACENT TO PAINTED SURFACES SHALL BE REMOVED OR PROTECTED PRIOR TO SURFACE PREPARATION AND PAINTING OPERATIONS. ITEMS REMOVED PRIOR TO PAINTING SHALL BE REPLACED WHEN PAINTING COMPLETED.

3 EXTERIOR WALL TO BE PAINTED SHALL BE CLEAN WITH WATER WASHER MACHINE AND BE FREE OF FOREIGN MATTER BEFORE APPLICATION OF PAINT OR SURFACE TREATMENTS. OIL AND GREASE SHALL BE REMOVED PRIOR TO MECHANICAL CLEANING. CLEANING SHALL BE PROGRAMED SO THAT DUST AND OTHER CONTAMINANTS WILL NOT FALL ON WET, NEWLY PAINTED SURFACES.

4 BLISTERING, CRACKING, FLAKING AND PEELING OR OTHER DETERIORATED COATINGS SHALL BE REMOVED. SLIGHT SURFACES SHALL BE ROUGHENED. DAMAGED AREAS SUCH AS BUT NOT LIMITED TO, NAIL HOLES, CRACKS, CHIPS, AND SPALLS SHALL BE REPAIRED WITH SUITABLE MATERIAL TO MATCH ADJACENT UNDAIMAGED AREAS.

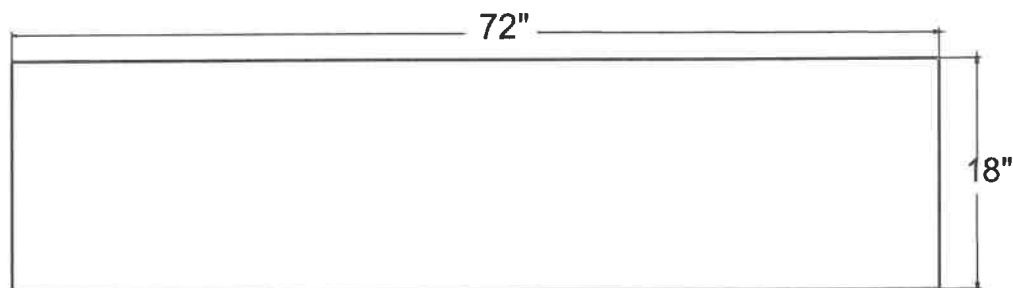
5 STEEL STRUCTURE SHALL BE SANDED AND PAINTED WITH ONE ANTI -RUST PRIMER AND TWO COAT OF STOP RUST INDUSTRIAL WATER BASE ENAMEL PAINT.

6 SEE PAINTING SPECIFICATIONS

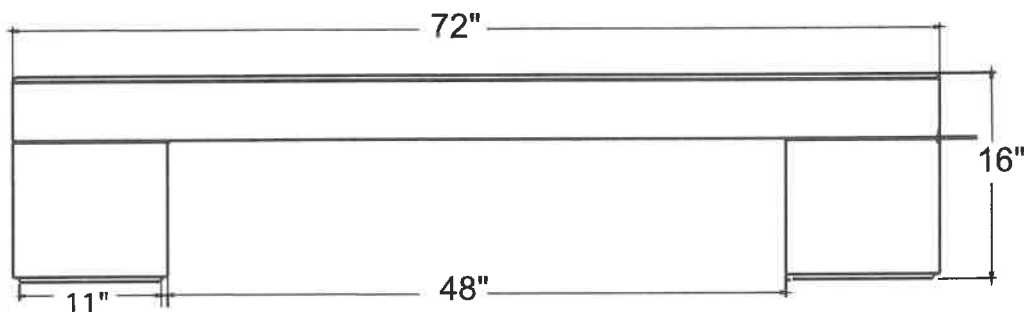
Model # TF5027

Dimension Sheet

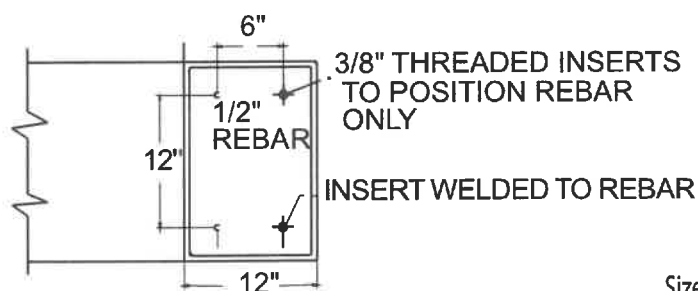
Precast Concrete Bench



TOP VIEW BENCH



SIDE VIEW BENCH



BOTTOM SECTION VIEW

Size:	72" L x 18" W x 16" H.
Weight:	900 lbs.
Seating Capacity:	5-6 persons.
Material:	Reinforced Precast Concrete.
Reinforcing:	1/2" Dia. steel rebar.
Hardware:	(4) - 3/8" Dia. threaded inserts.
Anchoring:	Optional
Maintenance:	Periodically rinse with water & mild detergent, and re-seal annually.
Packaging:	Banding to pallet optional. One piece construction

2.2 MATERIALS

- Portland Cement: ASTM C150 specifications for Portland Cement.
- Aggregates: All aggregates to meet ASTM C33 specifications, to be cleaned of foreign matter and properly graded to size.
- Coloring: Pigments used shall be inorganic, resistant to alkalinity and used as per manufacturers recommendations.