



SPHONCRETE | TrueRide | HD HEAVY DUTY

# SPOHN RANCH TRUERIDE SERIES SKATEPARKS DETAILED SPECIFICATIONS 2008



## GENERAL

### CERTIFICATION:

To ensure the highest level of quality in design, construction, and installation, the following certifications are required:

- All skatepark fabricators must be listed as an approved skatepark contractor by Skatepark Association, USA
- All skatepark fabricators must be voting members on the ASTM Skatepark Standards Committee
- All steel components shall be fabricated by certified welders
- All skatepark installers must be Factory-Certified Technicians who have performed at least ten similar skatepark installations within the last five years

### PRODUCT DATA:

Submit manufacturer's product literature indicating materials, finish, and other information required to demonstrate compliance for each component. If equipment is other than specified, a component-by-component description of variations from the specifications must be included with the manufacturer's literature. In addition, independent testing data must be submitted showing that the variations are proven equal or better (with respect to durability, longevity, strength, and usability) to the specifications.

Any vendor/contractor bidding alternate/substitute materials is required to explain in detail the variations from the listed bid specifications. Also list all variations in the size; height, length, or width of any obstacles that do not match those specified in the layout drawings attached. Failure to complete all explanations required by the bidders/contractors proposing alternate/substitute materials from those specified or variations on the size; height, length, or width of any obstacles that do not match those specified in the layout drawings attached may be grounds for rejection of the bid. If awarded bid is later found to not comply with these specifications and the detailed explanations were not provided thoroughly and completely with their bid submission, it would be the vendor/contractor's responsibility to remedy the items/materials of concern and comply with the specifications. If an acceptable corrective action cannot be rectified, at the owner's discretion, it will be the vendor/contractor's responsibility to remove the materials from the owner's premises at the expense of the vendor/contractor.



#### **DRAWING SUBMITTALS:**

Scaled plan and 3D perspective view drawings shall be submitted that exactly match the specified equipment layout. All obstacle heights, widths, lengths, and other geometry shall not vary from those listed. Equipment layout shall conform to industry standards for spacing and placement of obstacles.

#### **SAMPLES:**

If equipment is other than specified, submit samples including, but not limited to: support structure, enclosure panel, deck, rail assembly, and surfacing materials.

#### **WARRANTY:**

Provide a certificate of warranty that meets or exceeds the requirements below. If the manufacturer's standard warranty does not meet these minimum requirements, a certificate of extended warranty from the manufacturer or contractor must be included. Warranty periods may not be expressed as "Lifetime" and must be expressed in specific years as required below. For more details, see the attached document.

As a minimum, manufacturer shall provide proof of:

- Ten-year limited warranty on structural materials (wood and plastic)
- Ten-year limited warranty on Galvanized Steel Approach Plate and other Metal Pieces
- Five-year limited warranty on phenolic (Skatelite Pro) riding surface\*

\*Riding surface warranty must carry the same length of time that the manufacturer has been using it on their products to warranty that their surface is "as equal" to Skatelite Pro. If vendor/contractor is bidding an alternate/substitute riding surface, they must provide 5-references within the last 5-YEARS that have used their alternate riding surface to prove that it is suitable for skatepark use.

#### **INSURANCE:**

Manufacturer must carry a minimum of \$7 million in Product Liability Insurance, and provide proof of such insurance with bid.

Designer must carry a minimum of \$2 million in Professional Liability (Errors & Omissions) Insurance, and provide proof of such insurance with bid.

#### **QUALITY ASSURANCE:**

Manufacturer: At least fifty completed skateparks constructed with the exact same materials and construction techniques. Upon request, provide list of completed structures to the Owner's Representative with skatepark owner's name, address, phone, and representative's name.

Lead Installer: At least twenty-five completed skateparks constructed with the exact same materials and construction techniques. Upon request, provide list of completed structures to the Owner's Representative with skatepark owner's name, address, phone, and representative's name.



#### **DEVIATIONS FROM SPECIFICATION:**

If equipment offered differs from the provisions contained in this specification, such deviations must be explained in detail and submitted with the bid. Testing data must be provided proving equal or better.

### ***PRODUCTS***

#### **MANUFACTURERS**

The following skate park equipment specifications are based on those provided by Spohn Ranch, Inc. 15131 Clark Avenue, City of Industry, CA 91745, (626) 330-5803. Any proposal shall meet or exceed the specifications herein as determined by the owner or the owner's representative. Alternate/substitute materials will be considered for approval; however; it will be the sole discretion of the owner or owner's representative to determine if such proposal for alternate/substitute materials is acceptable. All equipment manufacturers requesting approval of equipment for use on this project must submit all information and certifications as required and specified herein TEN DAYS prior to Bid or Due date for approval by owner or owner's representative. Submittal packages that do not include all the required information will be returned and will not be considered for use.

#### **COMPONENT CONSTRUCTION**

- All exposed and interior ramp panels must be cut and counter bored on a CNC Router.
- 90% of all equipment shall be manufactured in a controlled manufacturing environment with precision tools, trained labor, squaring jigs and consistent construction practices.
- On site manufacturing is not considered a controlled environment, leads to inconsistent quality and is not acceptable.
- All exposed ramp sides will be constructed using 5/8" P.R.P.™. P.R.P.™ is 100% high density Polyethylene. P.R.P.™ is UV protected, waterproof, and maintenance free.
- All internal ramp panels will be constructed using 5/8" BC grade Marine Tech ACQ treated plywood. All plywood must have a Limited Lifetime Warranty from the manufacturer.
- Sections shall be framed with 2x6 Prime Grade ACQ pressure treated lumber spaced on 8" centers. All stud lumber must have a Limited Lifetime Warranty from the manufacturer.
- The top joist of every transitioned or curved ramp below the coping will be constructed with a manufactured 1" thick by 5" wide BC grade Marine Tech ACQ treated plywood stud. All plywood must have a Limited Lifetime Warranty from the manufacturer.
- Minimum #10 3" stainless steel torx drive course threaded wood screw used for assembly of ramp components. 3 screws per stud end or 6 per joist.
- Sections shall be sheathed with one layer of 3/4" (flat sections) or two layers of 3/8" (radiused sections) BC grade Marine Tech ACQ treated plywood substrate. All sheathing shall be fastened with FS100 exterior construction adhesive on all framing members along with a minimum of 2 1/2" hot dipped galvanized screws every 12". 1/8" space will be maintained for expansion.
- Galvanized carriage bolts of 1/2" diameter with washers and nylon insert nuts shall be used to secure ramp sections together. Carriage bolt placement is roughly every 16" along ramp edges.



- Perimeter sides of all ramps must have a hot dipped galvanized metal strip 1 ½" wide x same thickness as Skatelite Pro (¼"), and will run from coping to thresholds on ramps with mismatching curves or slopes, and will be installed with #10 2 ½" stainless steel torx drive course threaded wood screws (countersunk below surface) every 8" along strip.
- Final skating surface shall be ¼" thick Skatelite Pro fastened every 8" x 8" around perimeter and 8" x 12" within the center of sheet into framing stud with #10 2 ½" stainless steel torx drive course threaded wood screws. Deck sheet screw spacing is 8"x8" over entire sheet. Screw holes will be drilled and countersunk on a CNC router for consistency of screw depth and hole size. Skatelite Pro edges must be chamfered on the CNC router.

#### DECKS:

- Decks shall be framed with 2x6 Prime Grade ACQ pressure treated lumber in a maximum of 6' widths with framing members on 8" centers. All stud lumber must have a Limited Lifetime Warranty from the manufacturer.
- Deck width end beams will be constructed with a manufactured 1 ½" thick by 5 ½" wide BC grade Marine Tech ACQ treated plywood stud. All plywood must have a Limited Lifetime Warranty from the manufacturer.
- Minimum #10 3" stainless steel torx drive course threaded wood screws used for assembly of ramp components. 3 screws per stud end or 6 per joist.
- Decks shall be sheathed with ¾" thick BC grade Marine Tech ACQ treated plywood substrate. All sheathing will be fastened with FS100 exterior construction adhesive on all framing members and 2 ½" hot dipped galvanized screws. 1/8" space will be maintained sheets for expansion.
- Decks shall be secured to ramp section with a minimum of 6 3/8" x 3 ½" hot dip galvanized lag screws with washers.
- Decks are supported with 4"x4" recycled plastic posts secured with 6" galvanized ½" diameter carriage bolts, along with washers and double nuts. Bottom of post rests on a composite spacer to deter moisture.
- Final surface shall be ¼" Skatelite Pro fastened every 8" x 12" into framing stud with #10 2 ½" stainless steel torx drive course threaded wood screws.
- All perimeter deck edges where safety railings are installed will have 1" vent holes centered in every joist space.

#### SURFACE:

- Final skating surface shall be ¼" thick Skatelite Pro fastened every 8" x 8" around perimeter and 8" x 12" within the center of sheet into framing stud with #10 2 ½" stainless steel torx drive course threaded wood screws.
- Deck Skatelite Pro screw spacing is 8" x 8" over entire sheet.
- 90% of screw holes will be drilled and countersunk on a CNC router for consistency of screw depth and hole size.
- 90% of all Skatelite Pro edges will be chamfered on the CNC router.
- All screws will be set approximately 1/16" below the skating surface.
- 1/8" space will be maintained between adjoining sheets for expansion.



### **SAFETY RAILINGS:**

- All railings shall have vertical balusters and be fabricated from structural steel tubing. Vertical baluster shall be 5/8" in diameter; horizontal railing section shall be 1 1/2" structural steel tubing. Spacing of the balusters will not allow a 4" vertical sphere to pass through.
- Railings are mounted to primary deck support posts (4"x4" recycled plastic posts) using 3/8" x 3 1/2" galvanized lag screws with washers to ensure the structural integrity of the safety railing system.
- Railing height shall be 42" above decks and shall comply with OSHA, ASTM, and IBC 2000 regulations.
- Corner Safety Railings shall be provided on ramps where applicable (shown on layout drawing).
- 6' maximum railing span to comply with 6' ramp sections.
- Corner railings shall stop 12" back from front of edges of decks.

### **STEEL:**

- Coping constructed with schedule 40, 2 3/8" diameter black pipe.
- All joints will be welded together and ground to provide seamless coping.
- On deck side of coping, a steel peg plate shall be installed to match the thickness of Skatelite Pro (1/4") and shall be 6" in width and shall be the same length as coping to provide a protective grind surface.
- Coping can also be 2"x2" 3/16" thick square tubing and 1 1/2" schedule 40 pipe on ramps that call this out.
- Coping shall be fastened to ramps in 24" increments with minimum #12 2 1/2" type 304 coursethreaded stainless steel wood screws.
- To prevent finger entrapment, Coping and Grind Rails shall have no holes and all ends must be capped.
- All Angle Iron is to be 4"x3" x 1/4" bent plate. This provides a rounded edge for increased safety.
- Grind Rails are to be manufactured with 3/16" walled steel components. All bases for ground mounted rails are 6"x8" x 3/16". All ramp mounted rails are 9 1/2" x 9 1/2" x 3/16".
- All Coping, Angle Iron, and Grind Rails will be hot dipped galvanized after manufacture to ensure thorough corrosion resistance.
- Galvanized steel thresholds shall be 3/16" thick to ensure a smooth transition onto ramps.
- All metal thresholds shall be a minimum of 15"- 22" at bottom of each ramp.
- All thresholds shall line up evenly where they meet ground surface.
- All threshold joints welded together and shall provide a seamless appearance. Joints will be ground smooth and painted with galvanized paint.
- Thresholds fastened to ramp with #12 2 1/2" type 304 course-threaded stainless steel wood screws every 16".
- On Hip and Pyramid corners Thresholds will be welded, ground smooth, and painted with galvanized paint.
- All exposed edges of Skatelite Pro are protected by a hot dipped galvanized metal strip 1 1/2" wide x 1/4" thick. All edging will be fastened 8" on center with stainless steel # 10 2 1/2" type 304 course threaded wood screws. Metal edging is used where ramps change



- direction or the angle on ramps with banks, wedges, curves, and transitions is changed.
- A 1 ½" hot dip galvanized strip will be set below all coping to protect the coping edge of the Skatelite Pro. Strap will be fastened every 8".
  - Where all Banks/Wedges and Box Tops join two 1 ½" hot dip galvanized strips will be used to protect Skatelite Pro and form an angled transitional joint between ramps.

#### **ENCLOSURES:**

- All areas beneath decks, box tops, and other openings large enough to allow unwanted access must be enclosed with 5/8" P.R.P
- ¼" space will be maintained for expansion of material.
- A 5/8" thick trim molding with 1" tall x 3" wide vent holes will be used along the bottom edge of all enclosing panels. The trim molding shall run to the ground to prevent unwanted access beneath the ramps.
- All ramp sides that make ground contact must have 1" tall x 3" wide vents in every other stud space and will run entire length of ramp.
- All perimeter deck edges where safety railings are installed will have 1" vent holes centered in every joist space.

#### **INDEPENDENT THIRD PARTY TESTING:**

- The following tests will be conducted through an independent third party testing facility for ensured safety and longevity of ramps
  - Static bending tests of constructed ramp cross-sections
  - Static bending tests of ramp stud materials
  - Impact performance of ramp decks
  - Thermal expansion of ramp deck materials
  - Freeze thaw bending performance of individual materials
  - Accelerated aging
  - Adhesive bonding strength between materials
  - Screw withdrawal testing

#### **TOLERANCES:**

- All exposed edges shall be galvanized steel.
- Coping reveals shall not vary more than 1/8" over the span of a piece of equipment. Precise protrusion of coping is critical to the use of skating equipment.
- All radii shall not vary more than 1/4" from stated dimension.
- There shall be a minimum 1/4" thick x 4" wide galvanized steel plate behind all coping.
- Fastener spacing for surface installation shall be a minimum of 16" square centers for the fields of the sheets.
- Fastener spacing for surface installation shall be a minimum of 8" square centers for the perimeters of the sheets.
- All fasteners shall be counter-sunk.
- All fasteners must have a bolt-through connection with a locking nut and washer.
- All ramps shall have return hand railing where applicable.
- No base plates/ adjustable feet shall be smaller than 4" outside diameter.
- Unless installed on an asphalt pad, no shims or support plates found below the adjustable feet, whether attached or unattached, shall be acceptable.



## **INSTALLATION**

### **SKATEPARK INSTALLATION:**

The Owner will provide a site prepared to bidder's specifications, waste disposal services, and a secure area for storage of skatepark equipment and tools prior to and during installation. If necessary, it is also the Owner's responsibility to provide site security during the installation.

The Manufacturer will provide a crew of Factory-Certified Installers experienced in municipal installations to assemble the skatepark equipment, and all specialty and basic tools necessary to complete the installation. These Factory-Certified Technicians must have performed at least ten similar skatepark installations within the last five years.

As well as building the highest quality skateparks, Spohn Ranch, Inc. strives to build long-term relationships based on confidence and trust with our clients. We stand beside, on top, and beneath the quality of our skatepark equipment and will make things right if you are not completely satisfied. To prove that, we provide a One-Year Guarantee on all of our installations. If any problems due to improper workmanship during the first year following installation, we will fix it for free (please see below for further details).

## **WARRANTY**

As well as building the highest quality skateparks, Spohn Ranch, Inc. strives to build long-term relationships based on confidence and trust with our clients. We stand beside, on top, and beneath the quality of our skatepark equipment and will make things right if you are not completely satisfied.

**GENERAL GUARANTEE:** Spohn Ranch, Inc. warrants its products to be free from defect in materials or workmanship during normal use and installation and in accordance with our published specifications. Spohn Ranch, Inc. further warrants as follows:

- Limited 10-YEAR WARRANTY against structural failure on Support Structure, Adjustable Feet, and Galvanized Steel Approach Plate.
- Limited 5-YEAR WARRANTY on Phenolic Surface and Stainless Steel Hardware
- Limited 1- YEAR WARRANTY on installation workmanship

The warranty stated above is valid only if the structures are erected by Spohn Ranch Factory-Certified Technicians in conformity with the layout plan and/ or installation instructions furnished by SPOHN RANCH, INC. using approved parts; have been maintained and inspected in accordance with SPOHN RANCH, INC. instructions; have been subjected to normal use for the purpose for which the goods were designed; have not been subject to vandalism, misuse, neglect, or accident; have not been subjected to addition or substitution of parts; and have not been modified, altered, or repaired by persons other than SPOHN RANCH, INC. or its designees in any respect which, in the judgment of SPOHN RANCH, INC., affects the condition or operation of the structures.



This warranty does not cover cosmetic items (such as scratches, dents, marring, fading, discoloring, and weathering), paint or decorations, normal wear and tear, or coating deterioration caused by climate conditions. Further, this warranty does not cover damage due to environmental and site conditions including, but not limited to, settling concrete, liquefaction, subsidence, and soil erosion. This warranty does not cover damage due to Acts of God including, but not limited to, hurricane, tornado, flood, riot, and fire. Further, the warranty does not cover damage due to vandalism, any action resulting in or from a criminal activity or any act of war. The warranty for the phenolic surface specifically excludes any damage other than the delamination of panels (please see the separate pages for the specific Skatelite Pro warranty details).

The above warranties commence on the date of installation completion. Should any failure to conform to any of the expressed warranties occur within the applicable warranty period, SPOHN RANCH, INC. shall, upon notification in writing of the defect, correct such nonconformity, either by repairing any defective part or parts or by making available a replacement part within 60 days of the written notification, at its option. This shall be the purchaser's exclusive remedy; SPOHN RANCH, INC. is not responsible for damages of any kind in contract or in tort, including INCIDENTAL AND CONSEQUENTIAL DAMAGES resulting from any breach of warranty.

SPOHN RANCH, INC. shall deliver the repaired or replacement parts to the site free of charge, but will not be responsible for providing labor or the cost of labor for the removal of the defective parts and the installation of any replacement part or parts. Replacement parts shall be guaranteed for the balance of the original warranty period; SPOHN RANCH, INC.'s warranties shall not be enlarged in scope or extended in duration and no obligation or liability shall arise by SPOHN RANCH, INC.'s repair or replacement of any component or surface.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, NO REPRESENTATION, ORAL OR WRITTEN, OF ANY SPOHN RANCH, INC. REPRESENTATIVE MAY BE SUBSTITUTED FOR THE AFOREDESCRIBED EXCLUSIVE LIMITED WARRANTY. TO THE EXTENT PERMITTED BY LAW, SPOHN RANCH, INC. SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHICH ARE EXPRESSLY EXCLUDED FROM THIS SALE.

To make claim under the terms of this Warranty, the Buyer's written statement of claim, along with a copy of the original invoice, maintenance records, and supporting photographs, must be sent to Spohn Ranch, Inc., 15131 Clark Avenue, City of Industry, CA, 91745.





## QUALITY CONTROL PLAN

The construction phase starts with a TrueRide skatepark designer transferring the layout from drafts to a finished electronic format using AutoCAD 2000 software. The sales associate and the designer work with the client to ensure the final design of the layout is correct. **(First Quality Check)**

Next, a pre-construction meeting is held to address the issues associated with building and installing the park. This includes construction specifics as well as scheduling the dates for construction and installation. Attendees include; the AutoCAD designer, the CNC programmer, the head of operations, the production manager, the assistant project manager; who is the sales associate working directly with the client. Once the layout is finalized the AutoCAD operator and CNC programmer are then given the go ahead to start the project. **(Second Quality Check)**

The CNC programmer begins by going through the layout ramp by ramp. Each ramp section requires two templates that are either created or pulled from a collection of previously designed ramps in our CAD system. Once completed, the CNC programmer sends a build list to the CNC router. The templates are routed out, organized, and queued for assembly. **(Third Quality Check)**

Prior to Assembly, a construction meeting takes place with the head of each shop to determine the order of construction and discuss specific production elements of the park. **(Fourth Quality Check)**

The templates go to the framing shop to be assembled into ramps. After assembly, they are sent to the sheeting shop where the substrate layer is applied. Most of the equipment is completed at this point and sent to the staging area for loading. Some of the equipment is sent to the Skatelite shop where the final Skatelite skating surface is applied. Equipment that requires steel grinding surfaces is sent to the on site steel shop to be finished. Once complete the ramps go to the staging area where the project manager and assistant project manager inspect the equipment and sign off on a quality check. **(Fifth Quality Check)**

From this point the equipment is loaded and checked off for delivery. On site, an experienced TrueRide Installation Crew and Foreman meet the semi to unload and start installation. The semis are unloaded and the equipment is positioned. All the ramps get bolted together and the decks are put in place. The Skatelite skating surface is applied to the necessary equipment along with thresholds and metal protective strapping. The safety railings, and enclosing, and grind rails are also installed. Seams in metal are welded and ground smooth. Once complete a final walk-through is performed with the installation foreman and the city officials to address any comments questions or concerns they may have. **(Final Quality Check)**