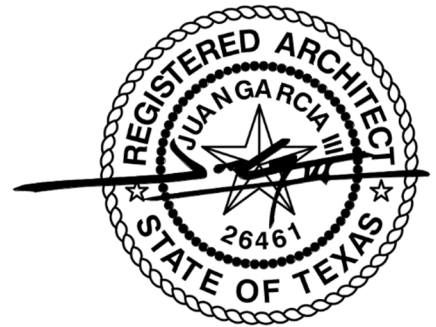


Addendum Number Two

Issue Date:
2/5/2025

Project:
Hale County
Juvenile Justice Alternative Education Program
Building Conversion & Multi-Purpose Building



The following are additions and changes to the Specifications and Drawings and shall become a part of the Contract Documents. Where items in the Specifications or Drawings are supplemented below, all original requirements shall remain in effect.

General

- Item #1G:** Refer to the attached approved substitution request Tennon Trowel-Ice dated 02.03.2025.
- Item #2G:** Refer to the attached approved substitution request SDS Mechanical Assist by Spacefile Corporation dated 02.04.2025.
- Item #3G:** Refer to the attached approved substitution request SSPC-15 Red Oxide primer dated 02.04.2025.

Clarifications

- Item #1C:** The specified High-Density Storage for rooms A103A & A129 shall include the following specification
 - a. Height: 6-foot min. to 7-foot max.
 - b. Depth: 15" for legal file size storage
- Item #2C:** The project camera system, access controls and I.T equipment will be provided by the General Contractor and funded by the allowance stated in section 012100 – 1.05 – C.
- Item #3C:** **Existing Fire Alarm System;** The current system in Building A is manufactured by Potter. Additional information regarding product numbers can be obtained by interested contractors by requesting a site visit prior to the BID date.
- Item #4C:** **Fire Alarm System;** New wiring shall be in ¾" red conduit.
- Item #5C:** Refer to section 323113-2.02-K.-1. for Chain link fence slat material.
- Item #6C:** Standard 2" plumbing service and meter will be acceptable for this project.
- Item #7C:** Exterior Doors A101 & A120; Consist of existing aluminum storefront frames and doors and associated panic hardware.
- Item #8C:** Section 074213 calls out Interior liner panel to be provided by Gordon Architectural Engineer solutions – perforated metal panel profile – F [CORRUGATED SCREEN WALL SYSTEM | Gordon Inc.](#) Manufacturer Substitutions of this perforated metal panel will be accepted so long as the substitution provides like kind and quality in finish, profile, acoustic value.
- Item #9C:** Metal Building Manufacturers shall consider a ceiling suspended basketball goal static load of 2500lbs in BLDG.'B' at the (2) locations identified on sheet S1.01 and A-103.1.
- Item #10C:** Metal Building Manufacturers shall consider a Ceiling Fan static load of 400lbs in BLDG.'B' at the (1) locations identified on sheet E-101.4.
- Item #11C:** Metal Building Manufacturers shall consider a Collateral load of 6psf and a Deflection load of . . .
Rigid Frames & Column Drift : Masonry Veneer Cladding; H/400 Lateral
Wall Girts & Eave Struts : Metal Panel Cladding; L/120 Lateral
Vertical end girts and end wall columns: Masonry Veneer Cladding; L/600 Lateral

Specifications

- Item #1S:** **Section 012100 - 1.05 - C. - Allowances;** Omit the following verbiage,
“*Visual & Audio Allowance: Include the stipulated sum/price of \$100,000.00 for use upon Owner’s instructions.*”
And Replace with the following verbiage
“C. Security Surveillance, I.T., Access Controls Allowance: Include the stipulated sum/price of **\$250,000.00** for use upon Owner’s instructions.”
- Item #2S:** **Section 075700 - 2.04 – Overcoat Materials - A.;** Omit the following verbiage,
“Overcoat: *Polyurethane-based* multi-layer coating over spray polyurethane foam (SPF), color as selected by Architect”
And Replace with the following verbiage,
“Overcoat: **Silicone-based** multi-layer coating over spray polyurethane foam (SPF), color as selected by Architect”
- Item #3S:** **Section 080671-7– Door Hardware Schedule - Hardware Set (HW06);** Omit door 104A and replace it with **B104A.**
- Item #4S:** **Section 080671-7– Door Hardware Schedule - Hardware Set (HW06);** Omit door 106A and replace it with **B106.**
- Item #5S:** **Section 074213– 2.02 METAL WALL PANEL SYSTEM – C. Soffit Panels;** Omit the verbiage “Style as indicated, with venting provided.” And replace it with “**Style as indicated, Flush panel (Smooth) , non-venting.**”

Drawings

- Item #1D:** **Sheet C200;** Omit Aluminum Slat annotation and replace with the (HDPE) High-density polyethylene.
- Item #2D:** **Details A1/A-103;** Consider 12” minimum height at roof edge metal fascia and Nailer 2x.
- Item #3D:** **Details B2/A-103;** Consider 12” minimum height at roof edge metal fascia and Nailer 2x.
- Item #4D:** Omit all indications of (6” Wall Girts) from BLDG. ‘B’. The wall girts shall be designed and properly sized by the PEMB Manufacturer.

END OF ADDENDUM TWO

SUBSTITUTION REQUEST FORM

TO: **bld. architects**

PROJECT: Hale County Annex 3 / JJAEP Building Conversion & Multi-purpose Bldg.

SPECIFIED ITEM: Mobile Storage Shelving Systems

10.56.26 18 2.01 A Manual Mobile Storage Shelving Systems

Section Page Paragraph Description

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: SDS Mechanical Assist by Spacefile Corporation

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- The same warranty will be furnished for the proposed substitution as for specified product.
- The same maintenance service and source of replacement parts, as applicable, are available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

The undersigned further states that the function, appearance and quality of the proposed substitution are equivalent or superior to the specified item.

Submitted by:

Firm JS Systems

Contact Jacob Schwartzer

Telephone 608-516-2650

Address 3225 East Baseline Rd, Gilbert, AZ85234

Email Jake@storageperfected.com

Date 2/03/2025

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: 

Date: 02.04.2025

Additional Comments:

Please add SDS Mechanical Assist by Spacefile Corporation to the list of approved manufacturers listed in section 105626.

SDS Mechanical Assist



Built to endure the toughest conditions, no matter what the application



Storage Solutions

Spacefile's SDS Mechanical Assist system offers exceptional strength, durability and unrivaled versatility for an extensive range of applications. An innovative gear reduction and drive system enables easy, ergonomic and simultaneous movement of multiple heavy-loaded carriages for highly efficient and accessible storage.

Features & Benefits:

- Ergonomic 3-spoke hand-wheels with revolving handles contribute to low-effort accessibility, even when moving heavily-loaded carriages.
- Spacefile's SDS Mechanical Assist system is an industry leading product, which has been refined through decades of research, engineering, design, and testing.
- Anti-tip devices are a standard feature on all Spacefile mobile systems. Additional safety options available.



Of Storage Innovation



SDS Mechanical Assist

- SDS Mechanical Assist systems are designed to accommodate any of Spacefile's shelving products as well as integrate with third-party shelving and custom storage solutions.
- Spacefile's innovative and extensive line of track and decking configurations provide an ideal solution for any application and facilitate installation on virtually any surface.
- Custom engineered carriages are available for unique applications.
- Expand, reconfigure and relocate your system with fully re-usable components. SDS Mechanical systems are designed to adapt to changing storage needs.

SDS Mechanical Assist - efficient, accessible, and ergonomic



Storage Solution:

Mechanical Assist carriages come in a variety of widths and can hold uprights with heights up to 16 feet, meaning it can be configured to solve your storage challenge.

Designed for rugged reliability, they can move immense weights smoothly, and easily.

About Spacefile

Spacefile International Corp. is a world leader in high-density storage, providing insights into how to successfully integrate mobile, static and customized modules into comprehensive storage solutions.

Our designs showcase ways to increase storage up to four-fold, with North American built products of uncompromising quality, attention to detail and best-in-class value. We are a North American-based manufacturer located in Toronto, with extensive experience in retail, corporate, library, museum, healthcare, government, industrial, and athletic applications.



SDS Mechanical system configurations:

- Designed to move:
- LT 4-Post Shelving
 - S-Line Industrial Shelving
 - Cantilever Shelving
 - ThinLine Tier Shelving
 - Weapons Storage
 - Third-Party Shelving

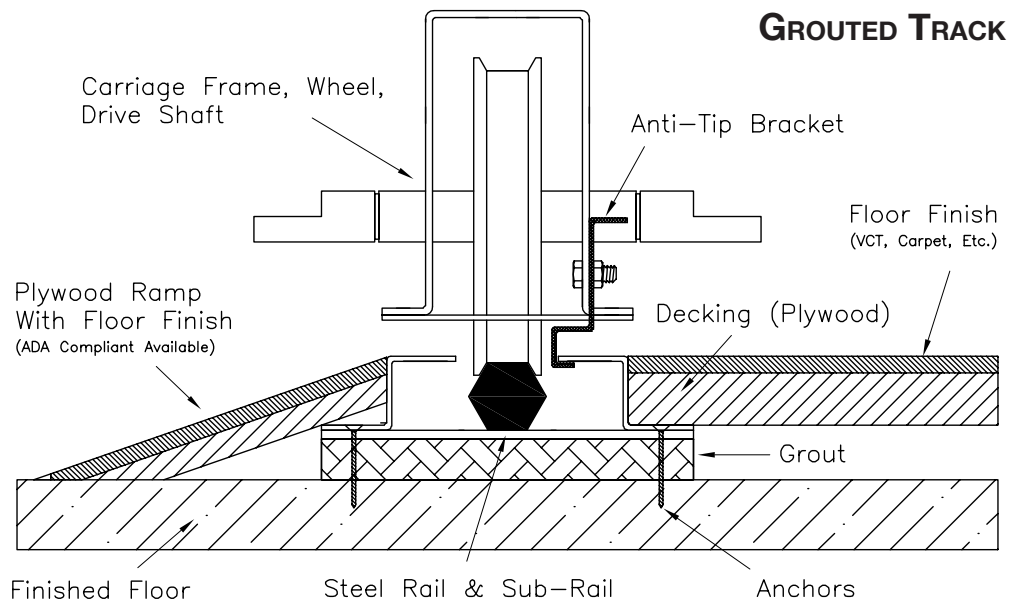
GROUTED TRACK



SDS MECHANICAL ASSIST SYSTEM, LT SHELVING,
CARPET FLOORING - CORPORATE

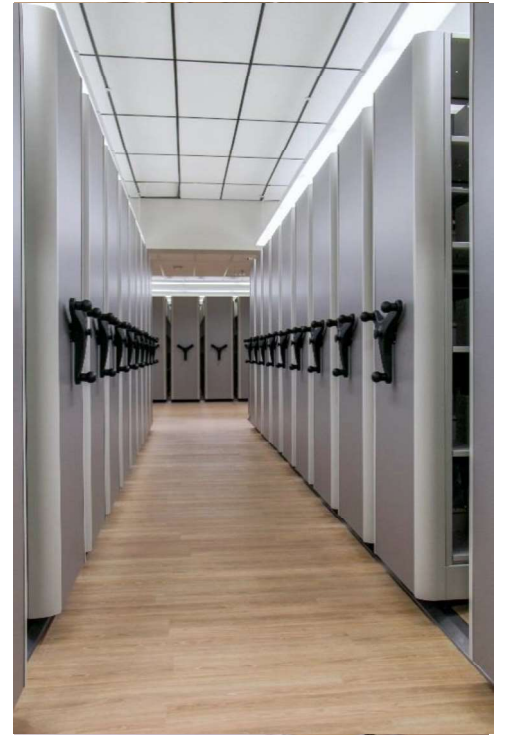
GRouted TRACK

- ✓ Uneven surface installation
- ✓ Heavy duty - engineered to withstand immense loading
- ✓ ADA compliant ramps available
- ✓ Anti-tip safety protection



Spacefile's grouted tracks are permanently anchored to the floor and plywood is utilized as decking between track channels for a uniform and even floor finish. Sloped entry ramps at the access points to the system contribute to a fully accessible system. Most floor finishing materials can be integrated with the plywood decking, including carpet, tile, vinyl, VCT, and linoleum. Tracks and plywood decking is fully supported by non-shrink hydraulic grout for a sturdy foundation capable of withstanding immense loading.





Spacefile

Approved Alternate Specifications

Section 10 56 26 – Mobile Storage Units

Part 1 - General

Spacefile International is a world leader in high-density storage, providing insights into how to successfully integrate Mobile, Static and Customized modules into comprehensive storage solutions. We are a North American-based manufacturer located in Toronto, with over 50-years' experience in Government, Retail, Corporate, Library, Museum, Healthcare, Industrial and Athletic applications.

We have formulated an extensive Sustainability Program and take our commitment to the environment very seriously. We have some of the most environmentally friendly products in the industry. Our mission is to provide products of the highest value, usability, safety, durability and product lifespan. Our entire team works very hard to ensure each project is completed to the satisfaction of the end-users.

- Manufactured in North America
- Industry-leading “Spacefile Safety Advantage” components on all systems
- We use North American steel with up to 42% recycled content and recycle all waste steel
- We utilize a program called “Sustainability at Spacefile” that puts actions into our commitment to the environment
- Four different types of storage solutions – fits any need

1.01 GSA Credibility

We have had a GSA Contract for many years, successfully completing many important projects in the United States. Our GSA contract # is GS-27F-0041X.

1.02 Executive Summary

Spacefile International has the distinction of being favourably rated as at least comparable to all the major industry manufacturers and being able to meet or exceed the required specifications of projects in this Section.

We have a rich history of successfully completing important projects such as:

- US Department of Justice – Washington, DC
- US Department of Homeland Security – Washington, DC
- FBI – Washington, DC
- Los Angeles Department of Power and Water - LA
- University of Vermont Bailey Howe Library

We have a network of representatives and certified installers across North America, Europe and the Caribbean. We have decades of experience in research, design and testing of high density

mobile storage systems. Our purpose is to provide products of the highest value regarding price, usability, safety, durability and product lifespan.

Other Strengths that show that we are at least comparable:

- Best-in-class quality
- Safety: Anti-Tip built into all our mobile systems – not so the competition
- Custom sizing – we can make sizes the others can't
- Track options – the most choices available – our 3-Piece Track gets rave reviews!
- Designs – we have highly experienced Designers and Engineers on staff

1.03 Seismic Performance Requirements

Seismic performance approved: we provide mobile storage units capable of withstanding the effects of earthquake motions determined according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 9, "Earthquake Loads".

1.05 Quality Assurance

A. Installer Qualifications: we engage experienced installers who are authorized representatives for both installing carriages and anchoring shelving units to carriages required for this type of project.

B. Product quality is confirmed as best-in-class with the guidance of our Quality Management Plan, recognized as being comparable to all the major quality assurance programs available.

2.01 Comparable Manufacturers

A. As a Basis of Design Product, we provide products that are comparable to products by all the major manufacturers including but not limited to:

1. Aurora Storage Products, Inc.; Aurora Mobile Systems.
2. Montel, Inc.; Mobilex.
3. Spacesaver Corporation
4. Datum

2.02 Mobile Storage System, General

A. General: we provide mechanical assist system consisting of manufactured storage units mounted on manufacturer's track-guided carriages to form a compact storage system. System design permits access to any single aisle by manually moving units until the desired aisle is opened. The carriage/rail system provides uniform carriage movement along the total length of travel, even without even loading.

B. Performance requirements:

1. We provide movable and stationary ranges consistent in design, construction, and configuration with uniform shelf height in the final installation.
2. We design, construct, test and furnish carriages, shelves, and related components to support and operate within the specified weight loads and within the specified

tolerances.

3. Operation of ranges: Quiet, smooth, and exhibit no twisting, racking, irregular movement or noticeable variation through the complete cycle of operation under any loading conditions.

4. System alignment: 1/2-inch maximum variation, measured between the edges of end panels within each range in all modules, in all aisle positions.

5. Rails, tracks, wheels, and all drive components shall exhibit no abnormal friction, abrasion, binding or wear on or between contact surfaces.

2.03 Mobile Storage Unit Components

A. Rails (Track): The number of rails and their spacing shall be defined by dimensions of the module and by storage capacity. The rails allow no movement or deflection during operation of mobile ranges.

1. Rails:

a. Material: ASTM/AISI Type 1035 or 1045 steel, manufacturer's selection.

b. Capacity: 1,000 pounds per lineal foot of carriage.

c. Minimum Contact Surface: 5/8 inch wide.

d. Provide rail sections in minimum 6-foot lengths.

e. Our Rail configuration permits attachment to top of structural floor system with provision for leveling rails to compensate for variations in floor surface level.

f. We provide rail connections designed to provide horizontal and vertical continuity between rail sections, to gradually transfer the concentrated wheel point load to and from adjoining rail sections.

g. Anti-Tip Rail Form Covers: we provide for protection if required to prevent damage to rails during concrete back pours, or when anti-tip devices are installed.

2. Carriage System Design and Features: The carriage system consists of a formed structural steel frame with machined and balanced wheels riding on steel rails. Our rails ensure smooth operation and self-centering of mobile storage units during travel without end play or binding.

Rail types, quantities and spacing shall be selected by the manufacturer to suit installation conditions and requirements. All bearings used in the drive mechanism shall be permanently shielded and lubricated.

3. Floor Construction: - Grouted Track

a. Floor: Constructed of minimum 3/4-inch underlayment grade, exterior glue plywood.

4. Carriages:

a. We provide movable carriages fabricated of welded steel construction.

- b. We provide fixed carriages of same construction and height as the movable carriages, anchored to rails.
- c. We provide each carriage with two wheels per rail.
- d. Movement Controls: Our Triple arm operating wheels with rotating hand knobs are provided on the accessible (drive) ends of shelf units, centered on the end panel, located approx. 40 inches from the base of each unit to permit units to be moved to create a single aisle opening. Turning the handle transmits power through chain drive to drive wheels on each carriage.
- e. Anti-Tip Requirements: we provide anti-tip devices on all carriages for stable and safe operation of equipment.

5. Drive System: our system is designed with a positive type mechanically assisted drive which minimizes end play, ensures there is no play in the drive handle, and that carriages will stop without drifting or ghosting.

- a. System shall include a chain sprocket drive system for each movable carriage to ensure that carriages move uniformly along the total length of travel, even with unbalanced loads. All system components shall be selected to ensure a smooth, even movement along the entire carriage length. Drive system gearing shall be designed to permit 1 lb. of force applied to the drive handle to move a minimum of 4,000 lbs. of load.
- b. our automatic tensioning device shall is provided on each chain drive without need for any adjustment.
- c. All bearings used in our drive mechanism are permanently shielded and lubricated.

6. Drive / Guide System:

- a. Design: our drive system prevents carriage whipping, binding and excessive wheel/rail wear under normal operation.
- b. All wheels on one side of carriage shall drive.
- c. Shafts: our shafts are solid steel rod.
- d. Shaft Connections: Secured couplings.
- e. Bearing Surfaces: our rotating load bearing members with ball or roller bearings.

7. Wheels:

- a. Capacity: Minimum load capacity per wheel: 3200 lbs.
- b. Size: Minimum 5 inches, outside diameter drive wheels.
- c. Guides: Determined by the layout; minimum 2 locations.

8. Safety Sweeps: Carriage Safety Brakes:

- a. Every potential aisle can be protected with a safety sweep. These internal aisle carriage safety brakes are included on mechanical assist carriages. Only 3 lbs or less pressure to be applied to actuator bar is required to fully stop the carriages. Actuator bar is the full length of the carriage so as to be able to stop the carriage anywhere within the open aisle. Internal aisle safety carriage brakes are fully mechanical with no battery or power requirements.
 - b. These safety carriage brakes shall automatically reset to enable mobile system users to freely and safely back carriages away from aisle obstructions simply by reversing the direction of the rotating handle.
 - c. Safety sweep shall be operational when the carriages are not moving. Should a sweep be activated in an open aisle, the carriage with the activated sweep will not close on that aisle. Safety sweep shall automatically reset if activated and then released when the carriages are not moving.
 - d. Safety sweep shall require no electrical power or batteries to operate.
9. Color-coded visual indicators on the Hub Lock provide verification that carriages are in a locked or unlocked mode.
10. A single safety hub lock button, mounted on each operating wheel hub, will permit moving a carriage in either direction to create a new access aisle when pulled out (unlocked), or locking the carriage when pushed in.
11. Face Panels: Plastic laminate-clad particle board.
- a. Color: As selected by Architect from our full range.

2.04 Four-Post Metal Storage Shelving

A. Our Four-Post Metal Storage Shelving is a factory-formed, field-assembled, freestanding system, designed for shelves to span between and be supported by corner posts, with shelves Adjustable in 1-1/2" increments over the height of shelving unit. We fabricate the initial shelving unit with a post at each corner. Additional shelving units as add-on units are designed to share two corner posts with the initial shelving unit. We provide fixed top and bottom shelves, adjustable intermediate shelves, and accessories.

B. Posts: Fabricated from cold-rolled steel; in a T-shape; with perforations at 1-1/2 inches on center to receive shelf-to-post connectors.

- 1. Steel Thickness, Nominal: 18-gauge.
- 2. Add-On Shelf Posts: Fabricated from hot-rolled steel, L- shape; perforated to match main posts and of same thickness.

C. Canopy Tops: Same construction as shelf units.

D. Solid-Type Shelves:

Shelves are formed from sheet steel with flanges on all sides and return hem on front and back flanges. Ends shall be formed to clear inside of upright offset panels. Shelves are independently adjustable in 1-1/2" increments. We can also provide shelves with slots for file dividers, as well as perforated shelves. Shelves are 22-gauge, with heavier-duty options available.

1. Shelf reinforcements are fabricated from 14-gauge steel. Heavier-duty shelf reinforcements are also available.
2. Shelf Supports are formed from 12-gauge steel sheet with four solid steel shoulder rivets, two per ear, that interlock with inner wall of uprights. (Double Rivet Supports)

3. We provide shelf units capable of supporting 40 pounds per lineal foot (18kg/305MM) with maximum deflection of L/140

4. Sliding Reference Shelf is formed from 18-gauge cold-rolled steel, attached to the underside of shelf supports where needed. The Reference Shelf is 12 inches deep. Reference shelves operate on ball bearing extension slides and can be mounted alone on single-face units or back-to-back on double-face units.

E. Back Stops are formed from 18-gauge steel. The face is slotted on same centers as the shelf to receive and retain file divider tabs.

F. Center Stop: Formed from 20-gauge cold-rolled steel, 4 inches high with mounting holes on the bottom flange and a flange at the top which acts as back stop with equal filing depth from both directions. The face is slotted to retain file dividers on same centers as shelves. Center stops are attached to center of double entry shelves with bolts and nuts.

G. Dividers:

1. Letter File Divider: Stamped from 22-gauge steel with two embossed tabs to enter matching slots in shelf and a retaining tab on the back edge to locate and stabilize the divider against back stop or center stop. Dividers are self-locking on shelf.
 - a. Size of standard divider is 7-½" High x 10-⁵/₈" Deep. Oversize dividers are available.
2. Standard Bin Dividers are from 22-gauge Cold-Rolled Steel and are 7-⁵/₈" High
3. Magnetic Dividers are from 22-gauge Cold-Rolled Steel and are 7-½" High
4. Full Height Bin Dividers are from 22-gauge Cold-Rolled Steel and are adjustable in 1-½" increments.

H. Barn Door

Our Standard Duty 20-gauge Cold-Rolled Steel Door Panels utilize a 14-gauge Cold-Rolled Steel Frame and are available in these standard sizes:

Height: 64-¼", 76-¼", 82-¼", 85-¼", 88-¼", 97-¼"
Width: 24", 30", 36", 42", 48"

I. Tambour Door

Our Tambour Doors are made from $\frac{3}{8}$ " Thick PVC door slot and come in different colors. They are available in these sizes.

Height: 64- $\frac{1}{4}$ ", 76- $\frac{1}{4}$ ", 82- $\frac{1}{4}$ ", 85- $\frac{1}{4}$ ", 88- $\frac{1}{4}$ ", 97- $\frac{1}{4}$ "

Width: 24", 30", 36", 42", 48"

J. Standard Pull-Out Drawers come in these standard sizes:

Height: 4 $\frac{1}{2}$ ", 6", 9", 12"

Width: 24", 30", 36"

Depth: 12", 15" (Letter), 16", 18" (Legal), 24", 30", 36"

Optional item: Cam Lock

Note: 4- $\frac{1}{2}$ " high Drawer Comes with Black ABS Plastic Handle

2.05 Wide-Span Metal Storage Shelving

A. Design – S-Line Industrial Shelving

Our design is a wedge-lock type consisting of uprights, shelves, and shelf supports, designed to be assembled without fasteners or clips except for center stops (if required). Shelves are metal. Shelves are solid with no slots except where dividers are being used. Front and back flanges are flush with outside faces of posts. Our design permits individual shelf adjustment and/or removal anywhere along the entire height of uprights.

B. Materials and Workmanship

Our units are fabricated from Class 1, cold-rolled steel sheet with all bends sharp and true and no exposed "knife" edges. All units are free of burrs, sharp edges and projecting hardware with smooth, non-abrasive surfaces and edges. After fabrication, shelving exhibits no dents, "oil canning", buckling or other surface irregularities.

C. Starter and Adder Posts

We use 14-gauge cold rolled steel, roll-formed into a 3" wide "A" upright with keyhole slot holes punched on 1- $\frac{1}{2}$ ". Front and rear posts are joined together with a minimum of three 3" high 16-gauge spacers, maintaining proper upright spacing along the entire length of the upright and add rigidity and strength. The open "S" roll formed into a 1.5" wide upright is typically used for row ends with open "A" uprights used as a common upright between shelf units. All uprights include an identifiable pair of punched holes every 6" on center allowing a visual confirmation for proper shelf spacing.

D. Shelf Decking

We form our steel decking from sheet steel with flanges on all sides and a return hem on the front and back flanges. Ends are formed to clear inside of upright Channel Supports. Shelves are independently adjustable. All shelves are provided with slots for file dividers. Shelves shall be 14-gauge. Maximum width of individual shelf decking pieces to be 12". Shelf Decking must support the intended loading without any external shelf reinforcements or supports. Shelf Decking must be supported only by channel supports.

E. Channel Supports

Our Channel Supports are formed from 12-gauge steel sheet with four solid steel shoulder rivets, two per ear, that interlock with inner wall of uprights. Channels support are located on all four sides of the shelf decking.

F. Nominal Shelf Dimensions

1. Standard Width: 36 inches (914MM), with 30, 42, or 48-inch (762, 1067, or 1219MM) sections used to meet project requirements.
2. Vertical Minimum Adjustment Increment: 1-1/2 inches (38MM).
3. Levelness of Completed Shelf Units: Maximum 1/8 inch (3.2MM) between bottom shelf and canopy top, measured along the edge of any upright in any direction.
4. Number of Vertical Shelf Spaces: As indicated on the drawings
5. Vertical Shelf-To-Shelf Spacing: As indicated on the drawings.
6. Accessories: File dividers. As indicated on the drawings

2.06 Cantilever Shelving

A. Welded Frames

Our Column Uprights consist of 16-gauge steel formed into a channel shape with 1/2" stiffening flanges, the channel to measure 2" in the web and 1 5/16" at the front and rear faces. They present a smooth, closed box shape 2" x 2 5/8" in cross section with eight right angle bends when bolted to the adjoining column of the next unit or bolted to an end cover. Each column is perforated full-height on both faces with a row of slots spaced 1" on vertical centers to receive hooks and lugs of shelf brackets, thus permitting 1" adjustment of shelves. In adjoining columns, the rows of slots are 5/8" on lateral centers. Columns are marked every three (3) inches to facilitate visual positioning and adjustment of shelves. Corresponding holes for bolting columns into ranges are provided. Two (2) uprights are required for each section of a range, since no adjacent sections may share a common upright and be truly modular. Bolted column uprights must create a vertical concealed chase for wiring and cabling.

B. Top Spreader Tube

The top spreader is a fully closed tube of 14-gauge, 2" x 2" square. This tube is securely electrically welded with continuous welds to the upright columns to permit unit arrangements and maximum non-sway capabilities. The length of this tube is variable for any unit width (36" standard). The top spreader is tubular to assure a closed surface where books or patrons may come in contact with the tube and visually pleasing from the top on low units and from the bottom on high units. This closed tubular shape additionally provides a chase for wiring and cabling.

C. Bottom Spreader Channel

Our Bottom Spreader Channels are channel-shaped, open to the floor, of minimum 14-gauge steel. This spreader is electrically welded on the two (2) vertical faces with continuous welds to the upright columns at a height to assure continuous through shelving on the base shelves. The length of the channel shall be as above for the top spreader. Slots in bottom spreader channel

are provided to perform leveling function at the column, without having to remove base shelf. The above top and bottom spreaders are electrically welded to the uprights with a full-bead of each of the four (4) joints to form a rectangular frame of one (1) piece construction without the use of nuts, bolts or any other type of fastener. The completed frame is rigid without the use of sway braces, gusset plates, angle braces, or any other device that will obstruct the use of any or all shelves anywhere in the bookstack.

D. Adjustable Shelf

Our Adjustable Shelf is made of 18-gauge steel and formed with front and rear faces formed 3/4" high and box-formed with no less than four (4) 90-degree bends (i.e. down 3/4", return 5/8", return 3/8" and return 5/16"). They shall present a smooth, closed appearance on both faces inside as well as outside with all sharp edges eliminated, yet formed to receive book supports and label holders. Adjustable bookshelves are designed to carry books loads of 50 pounds per square foot without deflection in excess of 3/16".

E. Adjustable Shelf Bracket

Our Adjustable Shelf Bracket is made of 16-gauge steel designed to maximize storage space. Brackets have three (3) projections at the rear, two (2) hooks and two (2) safety lugs, to engage the column slots and permit easy adjustment of shelves with maximum possible protection against dislodgment. Brackets are fastened to the shelves with tabs. The bracket design allows for shelf adjustment upward or downward without disturbing adjacent shelves.

F. Gusset

Our Gusset is made of (1) piece 16-gauge steel, 32" or 48" high, triangular 2" at the top and depth of base at the bottom. A 1 1/2" bend with holes will allow anchoring to the floor. Provide minimum (3) gussets per double face range unless shelving height and seismic zone dictates otherwise. 2-piece Gusset with butt joint is unacceptable

G. Canopy Top

Our Canopy top is made of 18-gauge steel. The faces of the canopy top are 1-1/2" high. Inverted type bracket supports for canopy tops are formed of 12-gauge steel. A suitable hole is provided on either side of the canopy top so that adjacent tops can be bolted together for uniform alignment.

2.07 Library Cart

Spacefile's Library Cart is a double-sided cart that is 24" wide, 36" long and approximately 46" high depending on the top material. Spacefile's Library Cart comes with a fixed shelf on the bottom and two adjustable shelves. Shelves are adjustable on 1.5" increments.

Spacefile's Library Cart has a 1000 lb. capacity using 5" blue rubber casters for easy movement, each caster having an individual capacity of 440 lbs. Carts can either come with 4 swivel casters with brakes, or 2 swivel casters with brakes and 2 fixed casters depending on the end user's preference.

Spacefile Library Carts are available in all our standard colors with no upcharge and are available with laminate tops and laminate sides. Laminate tops overhang by 0.5” on all sides. Carts are shipped either KD (unassembled) or fully assembled. Handles are also available.

2.08 Grout

A. General

We provide non-shrink, non-staining hydraulic cement compound conforming to the following requirements, based on the performance of the test specimens at room temperature and in laboratory air.

1. Linear Movement: No shrinkage while setting; maximum expansion limited to .002 inches per linear inch.
2. Compressive Strength: Based on two-inch cubes made following ASTM standards, tested on a Balding-Southward machine of 60,000 pounds capacity, meet or exceed the following:
 - a. Age: 1 hour, 4,500 psi
7 days, 8,000 psi

2.09 Fabrication

A. We prefabricate shelving components in shop to greatest extent possible to minimize field fabrication; temporarily preassemble shelving components where necessary to ensure that field-assembled components fit together properly. We use connections that maintain structural value of joined pieces.

B. We fabricate metal storage shelving square and rigid, with posts plumb and true and shelves flat and free of dents or distortion. We fabricate connections to form a rigid structure, free of buckling and warping. We also:

1. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges.
2. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Locate joints where least conspicuous.
3. Build in plates, brackets, and other reinforcements as needed to support shelf loading.
4. Cut, reinforce, drill, and tap metal fabrications to receive hardware, fasteners, and similar items.

C. We form metal in maximum lengths to minimize joints. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing the work. Form backs of shelving units up to 48 inches wide from one piece.

D. Form edges and corners free of sharp edges or rough areas. Fold back and crimp exposed edges of unsupported sheet metal to form a 1/2-inch- wide hem on the concealed side; ease edges of metal plate to as small a radius as possible. Shear and punch metals cleanly and

accurately. Remove burrs.

E. Weld corners and seams continuously to develop strength, minimize distortion, and maintain the corrosion resistance of base metals. At exposed locations, finish welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface. Weld before finishing components to greatest extent possible. Remove weld spatter and welding oxides from exposed surfaces before finishing.

2.10 Finishes, General

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Finish all steel surfaces, components, and accessories except prefinished stainless-steel and chrome-plated surfaces.

2.11 Metallic-Coated Steel – Sheet Finishes

A. Surface Preparation

We clean surfaces with nonpetroleum solvent, so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas, and apply galvanizing repair paint, complying with SSPC-Paint 20, to comply with ASTM A 780.

B. Powder-Coat Finish

Our standard baked-on finish consists of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pre-treatment, application, and minimum dry thickness.

1. Color: As selected by Architect from manufacturer's full range.

Summary

The California Sales Organization offering of products from Spacefile International provides a comparable alternative product that meets or exceeds the specifications offered from all the major manufacturers.

- Best-in-class design and quality
- Seismic approved
- GSA contract in place
- 50-years of experience – many thousands of successful projects completed



For further information contact:

**JS Systems
3225 East Baseline Road
Gilbert, Arizona 85234**

**Jacob Schwartzer
President
Direct: 608-516-2650
Email: Jake@storageperfected.com**



Spacefile International Product Warranty

LT Shelving, S-Line Shelving, Supreme Cantilever, Mechanical and Electrical Components

Spacefile International Corp. warrants to the original purchaser that Spacefile manufactured product will be free of defects in materials or workmanship. Spacefile will provide a five (5) year parts and one (1) year labor warranty from date of shipment for all Spacefile mechanical components, Spacefile LT Shelving, Spacefile S-Line Shelving and Spacefile Supreme Cantilever shelving. SDSe electrical components have a one (1) year parts and labor warranty.

Other

This product warranty is contingent upon the normal and proper use of the product. Damage resulting in whole or in part from alteration, misuse, abuse, neglect, fire, accident, flood, or act of God; improper use or application of the product; or any defect in products not covered by this warranty. Structural frames exclude all moving parts, guides or controls with immediate contact with moving parts.

This warranty does not apply to defects arising from accidents, misuse, improper installation, installation by non-qualified installers, improper operation, normal wear and tear, neglect, unauthorized repair or alteration.

Spacefile's obligation to repair or replace any product which fails to meet the expressed warranty set forth above, is the sole and exclusive remedy for a breach of such warranty. The expressed warranty is the sole warranty with respect to the product and is in lieu of all other warranties for merchantability and fitness for a particular purpose.

Under no circumstances shall Spacefile be liable for any consequential, incidental, special or exemplary damages arising out of or connected with the delivery, sale, use, or performance of the product, even if Spacefile is appraised of the likelihood of such damages occurring.

In no event shall Spacefile's liability (whether in contract, tort, or otherwise) for damages arising out of or relating to a breach of the above expressed warranty exceed the purchase of the product. Such limitation on liability, shall without limitation, be applicable in the event that the sole remedy of repair or replacement for a breach of the above expressed warranty fails of its essential purpose or is otherwise unenforceable.

In the event of repairs or replacements, the warranty period shall be extended equal to the time for loss of use. This warranty is not transferrable.

SUBSTITUTION REQUEST FORM

TO: bld. architects

PROJECT: Hale County JJAEP Annex 3 - Building Conversion Multipurpose Bldg.

SPECIFIED ITEM: a) Fortex Corp b) Penesal FH-PS c) Solomon Lythic Dry 1 d) WF Medulus

033511 95 2.02 Surface Treatments - Concrete Floor Finishes
Section Page Paragraph Description

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: Tenon Trowel Ice by TCC Materials
- also a densifier section 2.03

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- The same warranty will be furnished for the proposed substitution as for specified product.
- The same maintenance service and source of replacement parts, as applicable, are available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

The undersigned further states that the function, appearance and quality of the proposed substitution are equivalent or superior to the specified item.

Submitted by:

Firm TCC Materials

Contact Barb Macdonald

Telephone 651-478-8726


Address 2025 Centre Point Blvd Mendota Heights MN 55120

Email bmacdonald@tccmaterials.com

Date 1-24-25

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: 

Date: 02.03.2025

Additional Comments: The approved product shall be considered in addition to the approved manufactures in section 033511.

1. PRODUCT NAME

Tenon[®] Trowel Ice

2. MANUFACTURER

TCC Materials[®]
2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA

Phone: 651.688.9116

Fax: 651.688.9164

Internet: tccmaterials.com

3. PRODUCT DESCRIPTION

Tenon[®] Trowel Ice is a VOC-compliant finishing aid that enhances physical concrete surface performance, while aiding in faster and easier surface finishing. Tenon Trowel Ice is a reactive, colloidal silicate densifier that lubricates freshly placed concrete, prolonging workability in adverse conditions, such as high wind, low humidity, or high ambient temperatures.

Features and Benefits

- Lubricates freshly placed concrete for more efficient surface finishing.
- Increases workability of the concrete without adjusting the surface water/cement ratio.
- Minimizes wear on surface finishing equipment.
- Increases productivity and ease of finishing concrete mixes that utilize fume silica, Type 1L cement, or air-entrained admixtures.
- Water based, no odor, transparent, and low VOC.
- Reduces potential for alkali silica reaction (ASR).
- Improves surface hardness and abrasion resistance.
- Minimizes cracking, crazing, and surface scaling.
- Can be used to aid application of Dry Shake Hardeners.

SAFETY

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com or contact TCC Materials at 651-688-9116 (7:30 AM to 4:00 PM CST).

CAUTIONS

Read complete cautionary information printed on product container prior to use.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Tenon brand product(s) under normal environmental and working conditions. Because each project is different, neither Tenon nor TCC Materials can be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

- Compliant with Federal US EPA A.I.M. VOC regulations including OTC, LADCO, SCAQMD, & CARB.

Composition and Materials	Formulated with a colloidal silica-based mineral in a water dispersion. Tenon products are manufactured only with the highest quality raw materials available and strict quality-control is practiced.
Color	Milky/Off-White (dries transparent)
Freezing Point	32°F (0°C)
Material pH	8-9
VOC	<50 g/L
A.I.M. Category	Not Regulated

Packaging

Tenon Trowel Ice is available in a concentrate and RTU (ready-to-use) packaging. The concentrate version is mixed with water at a 4:1 mix ratio.

- 1 gal. bottle RTU (3.78 L) – BOM #114864
- 1 gal. bottle Concentrate (3.78 L) – BOM #114865
- 5 gal. pail RTU (18.93 L) – BOM #114866
- 5 gal. pail Concentrate (18.93 L) – BOM #114867
- 55 gal. drum RTU (208.19 L) – BOM # 115195
- 275 gal. tote RTU (1040.99 L) – BOM # 115196

Shelf Life

For best use, the recommended shelf life is 24 months. If shelf life is beyond 24 months, please contact your distributor. Store in the original labeled container, away from moisture, and out of direct sunlight. PROTECT FROM FREEZING, best when stored 40°F – 90°F (4°C – 32°C). Keep containers tightly sealed when not in use.

5. INSTALLATION

Preparation

- Read all directions before starting work. Read and understand SDS pages for safety precautions prior to use.
- Tenon Trowel Ice is designed for use during the final concrete finishing stage. It should be applied to fresh concrete before screeding, floating, or troweling have begun.
- RTU version, thoroughly stir or shake to ensure no separation or settling visualized.
- Concentrate version, dilute one (1) part Tenon Trowel Ice to four (4) parts potable water.
- Thoroughly stir or shake again prior to application.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Application

Apply with low pressure spray that produces a flow rate of 0.5 gallons per minute. Tenon Trowel Ice diluted solution or RTU, should be applied evenly across surfaces that are ready for immediate screeding, floating, troweling, or other surface finishing. Do not allow pooling or puddling. Tenon Trowel Ice may be applied to areas previously treated and have started to prematurely dry. DO NOT exceed 300 sq. ft./gal. when applying multiple applications. Tenon Trowel Ice may also be used before and after dry-shake hardener applications when limited bleed water is available to wet out hardeners.

Cleaning

Sprayers and other equipment may be cleaned with soap and water, before material dries.

Limitations

FOR PROFESSIONAL USE ONLY! KEEP FROM FREEZING.

Tenon Trowel Ice does not replace curing procedures. Do not allow Tenon Trowel Ice to pond or puddle on the surface. Over application can cause concrete hazing/clouding to occur on the surface. DO NOT exceed 300 sq. ft./gal. when applying multiple applications. Make sure to toughly work in application of Tenon Trowel Ice before additional applications. Tenon Trowel Ice is not a curing compound and does not replace recommended curing practices.

Coverage Rate

Coverage rates are a starting point to understanding needed application rate. Coverage rates are based on the mixed RTU (ready-to-use) gallon of Tenon Trowel Ice.

Approximate Coverage @ 70°F (21°C)	Sq. Ft./Gal.	Sq. M./L
Finishing Aid	600–1000	14.4–24
Concrete Densifier	300–500	7.9–12.6

6. AVAILABILITY

To locate Tenon products in your area, please contact:

Phone: 651.688.9116
Email: info@tccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

8. TECHNICAL SERVICES

Technical Assistance:

Information is available by calling TCC Materials

(hours 7:30 AM to 4:00 PM CT):

Phone: 651.688.9116

Email: info@tccmaterials.com

Web: tccmaterials.com

Technical and Safety Literature:

To acquire technical and safety literature, please visit our website at: tccmaterials.com.

9. FILING SYSTEM

Division 3



TCC Materials

2025 Centre Pointe Blvd

Mendota Heights, MN 55120

tccmaterials.com



SUBSTITUTION REQUEST (During the Bidding Phase)

Project: Hale County Juvenile Justice New Multipurpose
Substitution Request Number: 001
From: Red Dot Buildings, LLC
To:
Date: 01/30/2025
A/E Project Number: 1224
Re:
Contract For:

Specification Title: Metal Building Systems
Description: SSPC-20 Zinc Rich
Section: 133419 Page: 264
Article/Paragraph: 2.04.G

Proposed Substitution: SSPC-15 Red Oxide Primer
Manufacturer: Various Address: Phone:
Trade Name: Red Oxide Primer Model No.:

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
Same warranty will be furnished for proposed substitution as for specified product.
Same maintenance service and source of replacement parts, as applicable, is available.
Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
Proposed substitution does not affect dimensions and functional clearances.
Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by:
Signed by:
Firm:
Address:
Telephone:

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01330.
Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
Substitution rejected - Use specified materials.
Substitution Request received too late - Use specified materials.

Signed by: [Signature]

Date: 02.04.2025

Supporting Data Attached: Drawings Product Data Samples Tests Reports