JB EQUIPMENT
INDUSTRY EXPERIENCE SINCE 1985

SYSTEM 200 INSTALLATION GUIDE

Boltless steel shelving for hand-loaded storage

Component reference, step-by-step assembly, sway brace placement charts and a final inspection checklist.



Single System 200 section with X-bracing

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Boltless shelves
Shelves lock onto compression clips. Only the X-braces are bolted.

Two-person build
One person holds the posts while the other sets the clips and shelves.

Adjustable on 2"
Clip positions every 2" along the T-post, shared by neighbouring bays.

1 System overview

System 200 is a boltless steel shelving system for hand-loaded storage: cartons, bins, files, parts and stock rooms. Each section is four T-posts and a set of steel shelves held on compression clips, steadied by bolted X-braces on the side and back.

- **Steel shelves:** 19 ga. steel with return-bend edges for strength, punched for shelf dividers. Each shelf sits on 4 clips.
- **T-posts:** 15 ga. steel, slotted on 2" increments. Each slot position takes two clips, so neighbouring bays share a post.
- **Sway bracing:** side and back X-braces, bolted, keep the run square and rigid.
- **Finish:** olive-grey powder paint.
- **Options:** gussets, back-to-back clips, footplates, solid side and back panels.

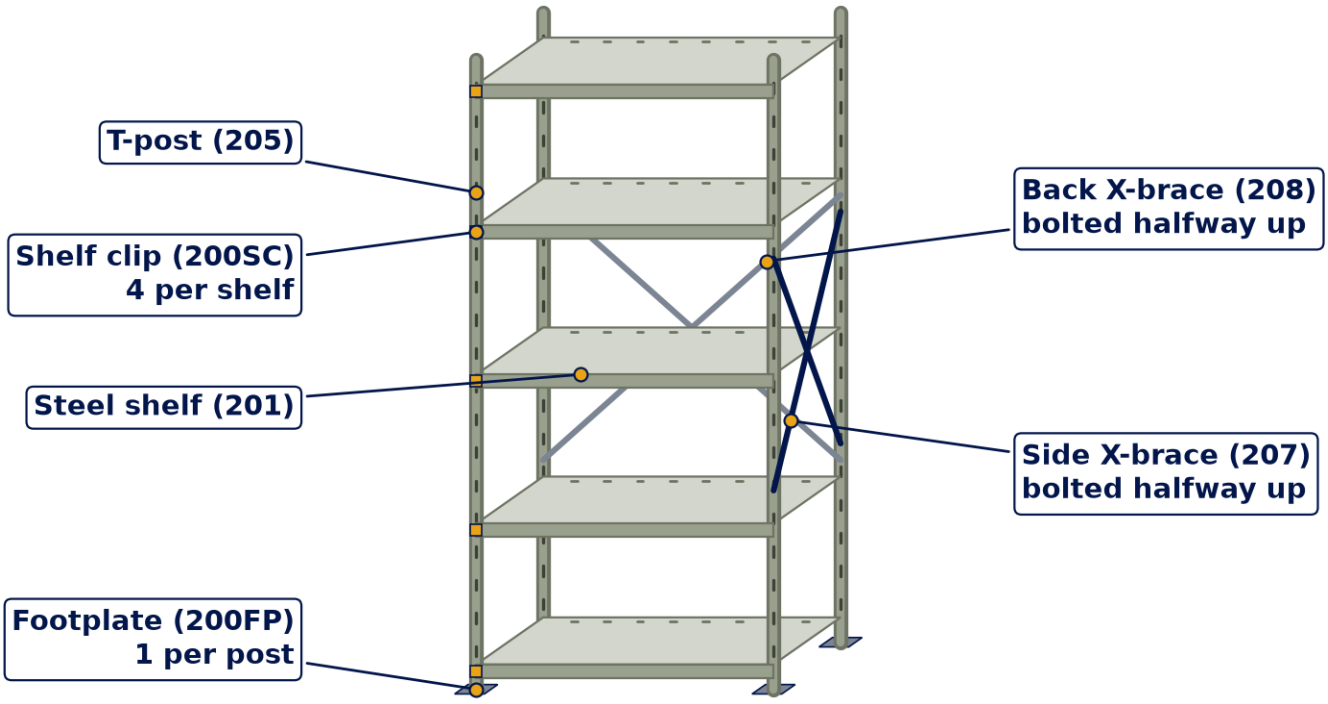


Figure 1. Parts of a System 200 starter section

2 Components and part numbers

Every component is sold separately, so you can order complete sections or only the parts you need. Use these tables to check your delivery before you start.

Steel shelves (201 series)

19 ga. with return-bend edges. Punched for dividers.

Part no.	Depth	Width
201 1236	12"	36"
201 1242	12"	42"
201 1248	12"	48"
201 1536	15"	36"
201 1542	15"	42"
201 1548	15"	48"
201 1836	18"	36"
201 1842	18"	42"
201 1848	18"	48"
201 2436	24"	36"
201 2442	24"	42"
201 2448	24"	48"
201 3242	32"	42"

T-posts (205 series)

15 ga. slotted on 2" increments. 4 per starter section.

Part no.	Height
205 76	76"
205 88	88"
205 100	100"
205 124	124"

Sway braces (sold in pairs)

Bolted in an X. Nuts and bolts supplied.

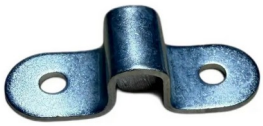
Part no.	Type	Length	Shelf depth
207 37	Side	37"	12", 15", 18"
207 43	Side	43"	24"
208 61	Back	61"	All depths

Side brace length is matched to the shelf depth. For 32" deep shelving, confirm the brace size with JB Equipment.

Clips, gussets and accessories

Part no.	Item	What it does	Typical quantity
200SC	Shelf clip	Compression clip that holds a shelf corner on the T-post	4 per shelf
200BB	Back-to-back clip	Ties two back-to-back rows together on the centre line	Per brace chart (Figure 3)
200G	Gusset	Corner stiffener for runs open from both sides; used instead of, or with, braces	As specified
200FP	Footplate	Spreads the post load and allows floor anchoring	1 per post
200 BPB	Back-panel bracket	Mounts a solid back panel to the posts	As specified
—	Solid side and back panels	Close the ends or back of a run	As specified


Shelf clip (200SC)


Back-to-back clip (200BB)


Gusset (200G)


Footplate (200FP)


Back-panel bracket (200 BPB)

3 Before you start

Tools and supplies

The shelves need no tools beyond a mallet. You will need a few hand tools for the braces and anchoring.

- Rubber mallet
- Wrench or socket set for the brace nuts and bolts
- Thin flat screwdriver (for angling back-brace flanges)
- Tape measure and 4 ft level
- Drill and floor anchors, if footplates will be anchored
- Step ladder for tall posts
- Safety glasses, gloves and safety footwear

Prepare the site

- Confirm the floor is sound and level.
- Mark the row positions, keeping aisles and exits clear.
- Check overhead clearance to lights, sprinklers, heaters and doors.
- If you will drill the floor, check for in-floor heating, conduit or other services first.
- Unpack and count parts against your packing list and the tables in section 2.
- Set aside damaged or bent parts. Do not install them.

CAUTION System 200 is best built with two people. Do not load any shelf until the section is fully braced and every shelf is locked onto its clips.

Load capacity depends on shelf size, gauge and configuration. Confirm the rating for your configuration with JB Equipment before loading.

Know your parts



T-post (205)



Steel shelf (201)



Side and back braces (207 / 208)

4 Clip, shelf and brace basics

Install a shelf clip

- Hold the clip with the longer end up.
- Insert the longer end first into the T-post slot at the height you want.
- Seat the shorter bottom end in the slot directly below.

Two-way locking (add-on bays)

Where a post is shared by two bays, place a second clip in the same slot, facing the opposite direction. One post then carries a shelf on each side.

Lock in a shelf

- Set 1 clip at the same height on all 4 T-posts.
- Slide each shelf corner over a clip.
- Press down firmly, or tap with a rubber mallet, until the shelf locks between the clips and the posts.



Longer end goes into the slot first



Shelf clip (200SC)

Side braces

Bolt a pair of side braces in an "X" across the two posts at the end of a section, about halfway up the posts. Use 37" side braces (207 37) for 12", 15" and 18" deep shelving, and 43" side braces (207 43) for 24" deep shelving.

Back braces

Angle the brace flanges to suit (see step 7), then bolt a pair of back braces in an "X" about halfway up the back of the section.



Brace flange bolted to the post



Side braces bolted in an X

TIP Keep braces away from the heights where you want shelves. The brace bolts sit in the post slots and will block a clip there.

5 Build a starter section

A starter section uses 4 T-posts. Each add-on section after that uses 2 more T-posts and shares the posts beside it, with two-way clips on the shared posts.

1

Stand up the first pair of posts

One person holds two T-posts upright, about one shelf depth apart.

2

Clip the top and bottom levels

Insert 4 clips, long side up, for both the top and the bottom shelf.

3

Set the bottom shelf

Place the bottom shelf over its clips and tap it down with a rubber mallet until it is firm.

4

Set the top shelf

Place the top shelf over its clips and tap it down the same way. The section now stands on its own.

5

Bolt the first side braces

Using the supplied nuts and bolts, attach one pair of side braces in an "X" at about the middle of the side height. Use 37" braces for 12" to 18" deep shelving and 43" braces for 24" deep.

6

Bolt the back braces

Attach a pair of back braces in an "X" across the back.

> **CAUTION** Keep braces away from heights where you need shelves. The brace bolts will get in the way of the clips.

7

Angle the back-brace flanges

Put a thin screwdriver through the bolt hole of the flange and twist it to about 45°, so the brace lies flat against the post. The paint may need to be "broken" first.

8

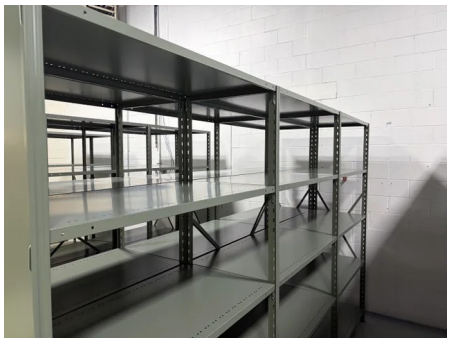
Finish the bracing

- **Single section:** attach the second pair of side braces at the other end.
- **Run of sections:** place the side and back braces as shown in the brace charts in section 6.

9

Fill in the remaining shelves

Insert the remaining clips at the heights you need, place the shelves and tap each one down to secure it. Use two-way clips on any post shared with the next section.



A finished run of System 200 sections



Loaded back-to-back sections

6 Brace placement for longer runs

You do not need side and back braces on every section of a long run. Use the charts below to place them. Frames (pairs of posts) are numbered from 0 at the start of the run; sections (bays) are numbered from 1.

Single-depth runs

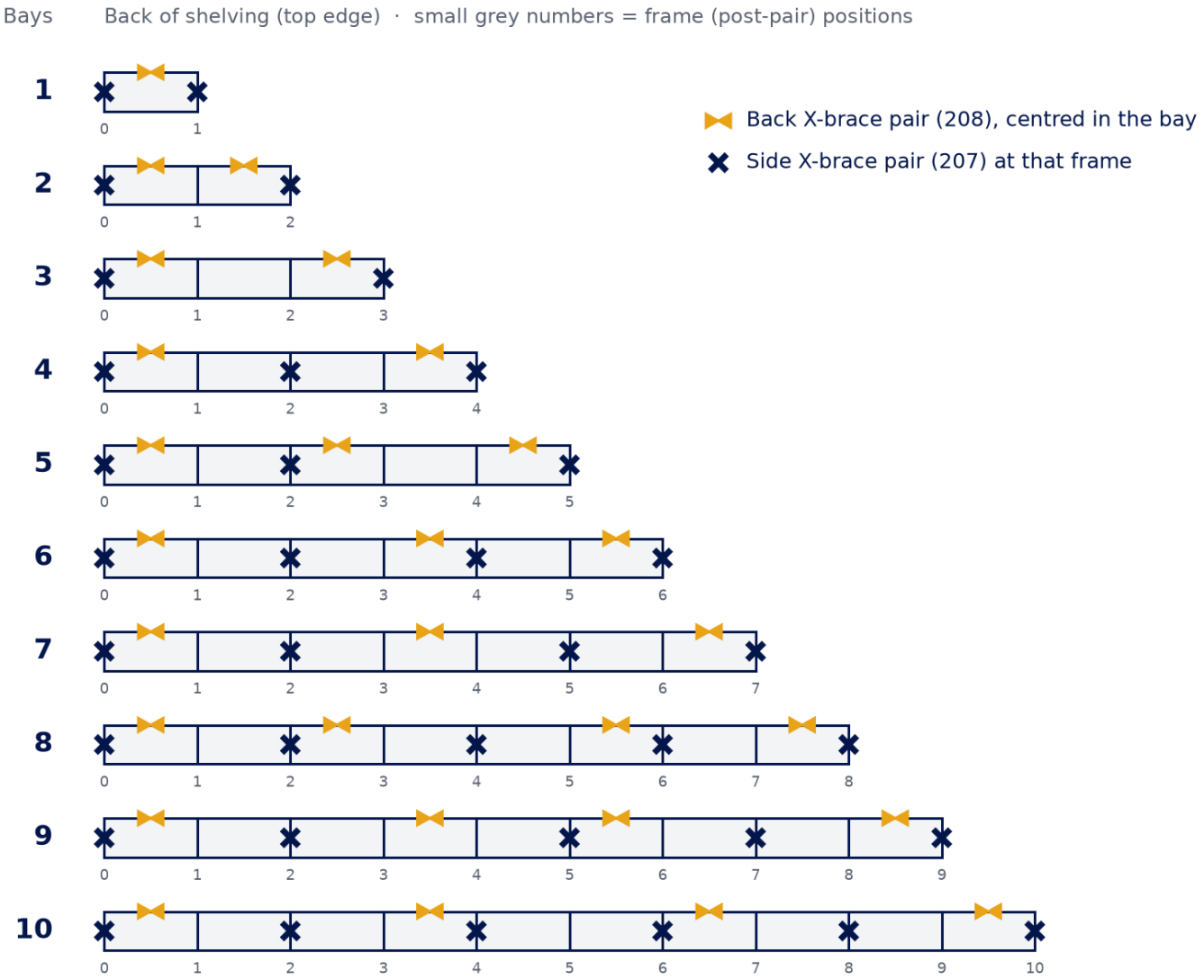


Figure 2. Side and back brace placement, single depth

Double-depth (back-to-back) runs

For two rows standing back to back, brace the outer side of each row at the frames shown, add sway braces along the centre line, and tie the rows together with 200BB back-to-back clips.

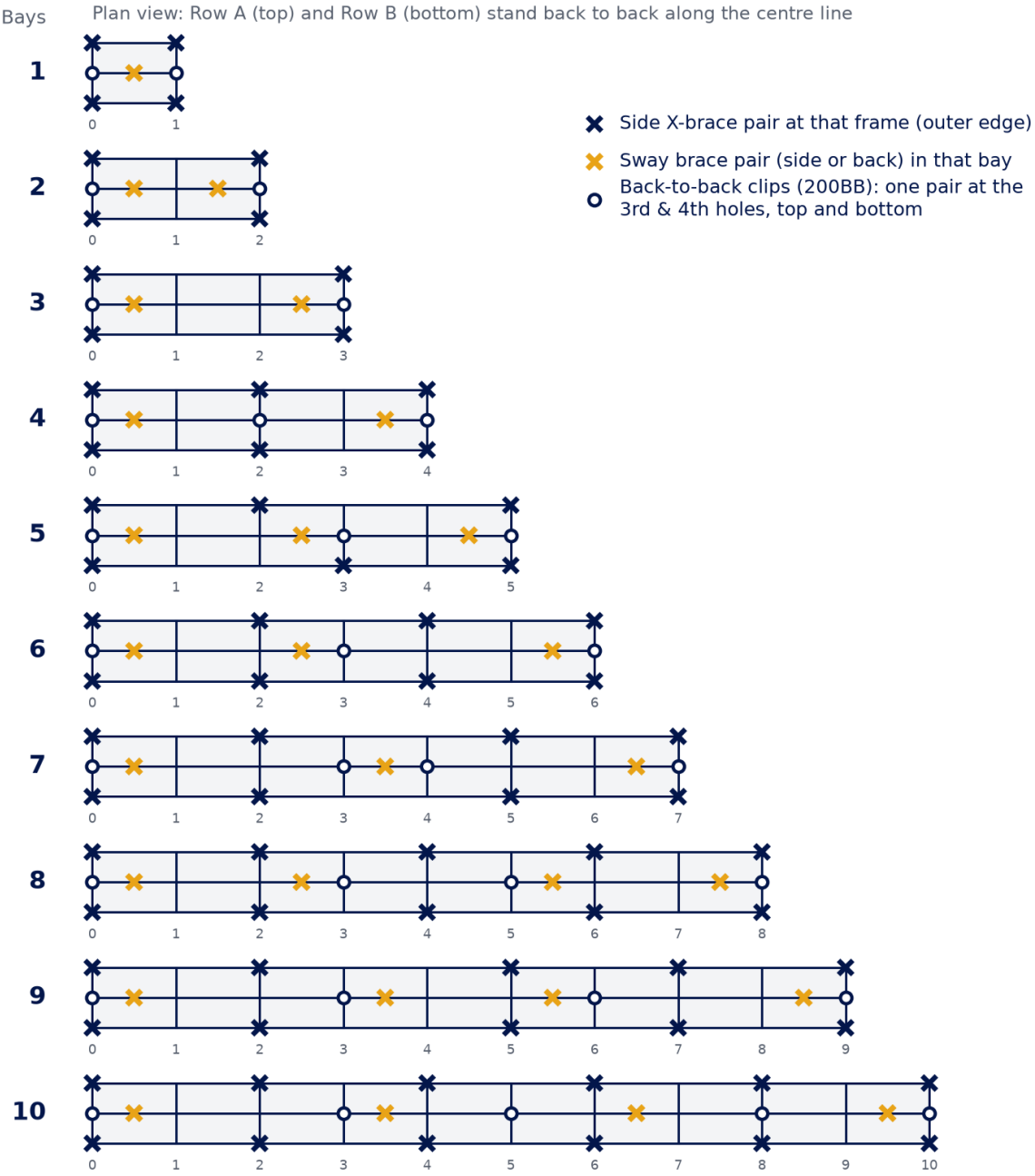


Figure 3. Brace and back-to-back clip placement, double depth

Brace charts in table form

The same placements as Figures 2 and 3, for checking off as you build.

Single depth

Bays	Side braces at frames	Back braces in bays
1	0, 1	1
2	0, 2	1, 2
3	0, 3	1, 3
4	0, 2, 4	1, 4
5	0, 2, 5	1, 3, 5
6	0, 2, 4, 6	1, 4, 6
7	0, 2, 5, 7	1, 4, 7
8	0, 2, 4, 6, 8	1, 3, 6, 8
9	0, 2, 5, 7, 9	1, 4, 6, 9
10	0, 2, 4, 6, 8, 10	1, 4, 7, 10

Double depth

Bays	Row A side braces	Row B side braces	Centre sway braces	200BB clips at frames
1	0, 1	0, 1	1	0, 1
2	0, 2	0, 2	1, 2	0, 2
3	0, 3	0, 3	1, 3	0, 3
4	0, 2, 4	0, 2, 4	1, 4	0, 2, 4
5	0, 2, 5	0, 3, 5	1, 3, 5	0, 3, 5
6	0, 2, 4, 6	0, 2, 4, 6	1, 3, 6	0, 3, 6
7	0, 2, 5, 7	0, 2, 5, 7	1, 4, 7	0, 3, 4, 7
8	0, 2, 4, 6, 8	0, 2, 4, 6, 8	1, 3, 6, 8	0, 3, 5, 8
9	0, 2, 5, 7, 9	0, 2, 5, 7, 9	1, 4, 6, 9	0, 3, 6, 9
10	0, 2, 4, 6, 8, 10	0, 2, 4, 6, 8, 10	1, 4, 7, 10	0, 3, 5, 8, 10

Frames are numbered from 0 at one end of the run. "Centre sway braces" lists the bays that get a side or back sway brace pair on the centre line. "200BB clips at frames" lists the frames that get a pair of back-to-back clips, one at the 3rd and 4th holes, top and bottom.



Back-to-back clip (200BB) joining two rows

7 Panels, gussets and anchoring

Solid side and back panels

Solid panels close the ends or back of a run for a cleaner look and to keep stock from falling through.

- A side panel assembly takes the place of the two T-posts at that end of the run.
- Back panels are mounted with 200 BPB back-panel brackets.
- Plan panel locations before you start, as they change the post count.



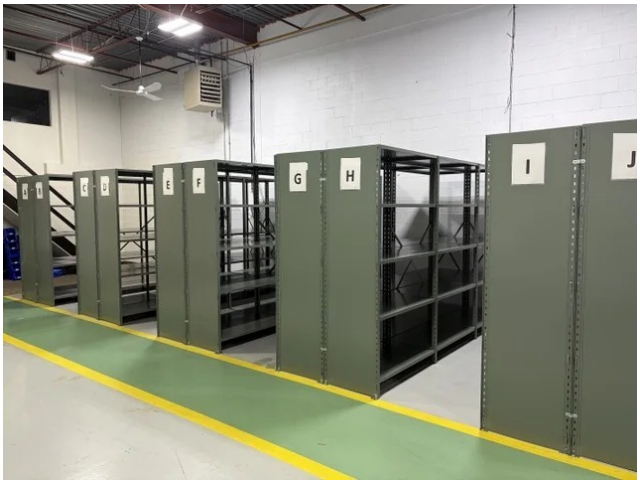
Solid side panels at the ends of each row

Gussets (200G)

Gussets stiffen the shelf corners on layouts that need access from both sides, where back braces would be in the way. They can be used instead of, or together with, braces. Confirm the layout with JB Equipment when replacing braces with gussets.

Footplates and anchoring (200FP)

- Fit one footplate under each T-post.
- Where shelving is tall, narrow, or in a busy area, anchor the footplates to the floor using anchors suited to the floor, following the anchor manufacturer's instructions.



End panels with aisle letters

Changing shelf heights

- Unload the shelf first.
- Tap the shelf up off its clips, move the 4 clips to the new slots, and lock the shelf back down.
- Do not remove the top or bottom shelf of a section while it is loaded; they keep the section square.

Adding to existing shelving

Before adding parts to an existing installation, confirm the post style, slot spacing and shelf sizes match. Send photos and measurements to JB Equipment rather than assuming similar-looking parts are interchangeable.

8 Final inspection and safe use

Inspection checklist

Check every item before the shelving is put into service.

- ☐ Every section is plumb and square, and every post stands on a footplate.
- ☐ Every shelf has 4 clips at the same height and is locked down onto them.
- ☐ Shared posts have two-way clips, one facing each bay.
- ☐ Side and back braces are in an "X", bolted tight, at the positions in the brace charts.
- ☐ Back-brace flanges are angled flat to the posts.
- ☐ Back-to-back rows have 200BB clips at the frames shown in Figure 3.
- ☐ Gussets, panels and anchors are installed where specified.
- ☐ No damaged, bent or missing parts.

Safe use

- Load shelves evenly, with the heaviest items on the lowest levels.
- Never exceed the rated capacity for your configuration. Confirm it with JB Equipment if you are unsure.
- Do not climb on the shelving or stand on shelves.
- Remove the load before adjusting any shelf.
- Inspect the shelving regularly. Unload and replace any damaged post, shelf, clip or brace before reuse.

Questions, missing parts or need it installed?

JB Equipment supplies and installs System 200 shelving across the GTA and southern Ontario, and ships supply-only orders across Canada.

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