

IRWIN TELESCOPIC SEATING COMPANY

## D Lastic seating modules



## Color and Comfort

When your taste is for color, plastic seat modules are right for you. With the innovative design of our plastic seat, comfort and durability no longer have to be sacrificed for color. Blow-molding technology allows for a degree of flex in the seat as well as a full $26-1 / 4$ " of uninterrupted, usable foot space, making this the most comfortable seat module ever developed. Seat modules are available in 10" or 12 depths and in 12 bright colors. Custom colors are also available.

## Contact Your Irwin Representative For Actual Color Selections.

The Tradition of Wood Seating


When the desire is for a warm and natural appearance, wood seats and risers are the perfect choice.

Each starts with edge glued, finger-jointed yellow pine (graded b \& better quality), coated with a clear polyurethane finish. Available in $4 / 4^{\prime \prime}$ or $5 / 4^{\prime \prime}$ thickness.

## Tntroducing...The Smart Rail!

## One Smart concept...a multitude of choices!

An innovative design engineered to be as flexible as the venue it serves, while greatly reducing or even eliminating operational time.


Rail partially folded


Rail in folded position


Rail in use position


Rail in use position

## FEATURES:

- Operation of rail is optional
- No tools required
- Reduces rail operation time to two seconds
- Added safety, as rail is never removed
- Standard or custom colors available
- Code compliant design

DESIGNER NOTES: For use on 22 " -26 " row spacing • Minimum 10" row rise


Designer Notes:

- Requires a minimum of 26" row spacing.
- Available in 12 standard or custom colors.
- Available with 12" row rise.
- Available using 10" Plastic Seat Modules or 4/4 Nominal Lumber.
- Can be randomly located (team seating or VIP area).
- No setup or takedown required.
- Seat number or donor tag available.


This revolutionary new concept adds a level of comfort to bleachers, never before available. The Irwin Folding Back Support is uniquely available using $26^{\prime \prime}$ row spacing, eliminating the high costs of the deeper row spacing required by traditional backrests. Expensive setup and takedown times are avoided as the patron simply raises the back to the use position, and are folded automatically by the closing operation of the bleacher, making this a very attractive, comfortable and cost effective seating upgrade.

Telescopic platforms, with or without attached chairs, are being used to take full advantage of today's multi-use design facilities, ranging from schools, drama departments, cafeterias, auditoriums and corporate training rooms, to full-event sports arenas. Platform sections can be rectangular or tapered in shape and provided from wall-attached type to portable in operation. Since the Irwin 5000 Telescopic System is custom engineered to fit the building needs, it can be provided with special riser heights, row spacing and deck materials to meet most conditions.

The Quest chair module (shown below and on page 5) is mounted to a folding beam that allows the chair to fold and store on the deck. The chair is furnished with a $3 / 4$ " safety fold seat. The back articulates forward 4 " in the unoccupied position for additional passage. The chairs are equipped with folding armrests for added comfort and can be furnished with number and letter plates for identification. Quest chairs are also available with a folding tablet arm. The chair is made from high-impact, onepiece, double-wall (blow-molded) linear polyethylene with the option of padded, upholstered seat and back. All types fold to a thickness of $5-1 / 2^{\prime \prime}$ for use on a $10^{\prime \prime}$ or greater platform rise.


The chair is available in widths of $18^{\prime \prime}-22^{\prime \prime}$, with or without arms (minimum of 19 " with arms). Dust covers are furnished on both semi-automatic and automatic operation.

Fold-down chair systems can be specified with manual, semi-automatic or automatic operation. Manual operation permits the raising and lowering of one, two, three, or four chair sections. A single operator accomplishes the raising of up to five semi-automatic chairs per beam with a spring assist. Automatic operation will raise all chairs with the operation of the platform. Each row will rise into the fully upright and lockable position as the platform opens so that partial rows may be used without fully opening all rows.

Semi and automatic chairs are lowered by the operation of the platform except the first row and any programmable row, which must be released manually. The locking and hinge system will be shrouded the entire length of the section for added safety. Contact the factory for fully automatic limitations.

1266 00/IRW


Plastic seat, back and arms are double-walled, blow-molded design for extra strength and durability. The Quest chair has the most ergonomic and anatomically correct design of any folding platform chair available today. The back offers a 4 " articulation for added comfort and better aisle passage space. Standard and custom colors are available.


Cupholder armrests can be furnished in matching or contrasting colors. Minimum recommended chair width is 20 ".



Quest chairs can be upholstered with a wide range of fabrics and colors, including the customer's own material, to complement any setting. Upholstery can be furnished at the time of installation or anytime in the future.

## Designer Notes:

- Quest chair requires a minimum 10" row rise.
- 18 " minimum chair width ( 20 " min. recommended).
- $22^{\prime \prime}$ minimum chair width with tablet arms.
- $33^{\prime \prime}$ or greater row spacing recommended.
- 36 " minimum row spacing with tablet arms.

Quest Chair Dimensions


Tablet Arm Dimensions


The addition of tablet arms can quickly convert a telescopic system into a multi-functional lecture or study area. Tablet arms are available in left- and right-hand models, feature a usable armrest when tablet is not in use, and are pneumatically dampened, self-storing, to comply with all building codes while ensuring smooth, quiet operation.

The Nose Mount auditorium chair offers the comfort and stability of a fixed auditorium chair with fully upholstered seat and back. The back folds to the rear to allow the platforms to telescope. This is a premium product that offers the very finest in comfort and aesthetics.

## Seat and Back Options

Nose Mount Chair Dimensions

## DIMENSIONS

CHANGE WITH CHANGE WITH
EACH INDIVIDUAL SEAT AND BACK OPTION. CONTACT FACTORY FOR


## Designer Notes:

- 7-1/2" minimum row rise.
- Add $1 / 2^{\prime \prime}$ to minimum row rise for Panelam or carpeted decking.
- 33" minimum row spacing (36" min. recommended).
- 5 chairs per beam maximum, $3^{\prime \prime}$ required between beams.
- Manual fold-down backs only.


No. 51 Marquee Back ( $7-1 / 2^{\prime \prime}$ minimum rise) (20-1/2" minimum width)


No. 47 Millennium Back (7-1/2" minimum rise) (19" minimum width)


No. 4 Citation Back (7-1/2" minimum rise) (20-1/2" minimum width)


No. 30 Patriot Back
(10" minimum rise) (19-1/2" minimum width)


No. 12 Seat


No. 12 Seat With Upholstered Insert


No. 130 Centurion Back (9" minimum rise) (19-1/2" minimum width)


No. 35 Seat


Panelam decking offers a bright, textured polyethylene surface with maximum durability and easy cleanup. Deck colors are available in either beige or grey to complement the seating color. Panelam decking is available in $5 / 8^{\prime \prime}$ or $3 / 4$ " thickness.


Aluminum decking is the perfect choice for facilities with a heavy schedule. Our aluminum decking is constructed of a heavy-duty $3 / 4$ " extrusion with a minimum 1/8" wall thickness. Aluminum decks are available in mill finish, clear or color anodized to enhance the appearance.

## Movable Options

With the design of today's multi-functional facilities, movable seating sections can be an integral part of the seating solution.


The built-in airlift system eliminates the need for lift truck storage and is supplied with an air compressor.


Using a pair of portable lift trucks allows each section to be relocated individually.

Contact the factory for specific applications.

Model 5000
Understructure is supported using sway bracing made from 14-gauge U-shaped formed steel. Bracing starts on row two and is through-bolted to the understructure with locking hardware.

Lower alignment system allows the understructure to compensate for slight floor variations yet


The upper portion of the row post has a 12gauge triple-formed cantilever, supported by a U-shaped double-formed column cap securely welded to the upright post. This dual supporting system is field adjustable and delivers incredible strength.
-


## Manual Operation

## Friction Power Operation

Friction Power is standardly equipped with \#50 prestretched roller chain and sprockets, weight trays and weights. Each unit is individually installed with two 6 " by 9 " rubber rollers. This heavy-duty and fully adjustable power frame helps compensate for uneven floor conditions. For safety, this unit operates at 18 FPM or less.

All power systems shall be U.L. Listed (\#E168517).


Manually operated assists such as portable operator handles or portable power tractors with tug frames are also available. Factory strongly recommends integral power operation for overall safety and best long-term value.

## Insist on an Irwin Understructure System

## Model 4500



Numerous heavy steel deck supports are located throughout the row to provide a safe and sound walking surface free of any deflection. The nose beam, decking and galvanized rear risers are bolted to the deck support using locking hardware. Deck supports are spaced 42" to 60" depending on the row spacing.


Cantilever support arms are triple-formed 10-gauge steel. The $3-1 / 4^{\prime \prime}$ wide arms are securely welded to the understructure supports making it a very strong and reliable design.


Nylon glides are attached to the wheel channels to prevent metal-to-metal contact, eliminating the need for lubrication.

Understructure supports are made of 1-1/2" X 3" 11-gauge structural steel tubing, welded 360 degrees to a 10-gauge formed wheel channel. Each wheel channel is equipped with a minimum of four $4^{\prime \prime} \times 1^{\prime \prime}$ wheels for better load distribution.

Understructure is supported using sway bracing made from 14-gauge U-shaped formed steel. Bracing starts on row two and is through-bolted to the understructure using locking hardware.


## Model 25

Non-Friction Drive System
U.S. Patent \# 6,199,325

The Model 25 Non-Friction Power unit has been designed for small to mid-size telescopic systems and is an inexpensive upgrade from friction power operation. Each drive unit is completely enclosed with a protective shroud for public safety and to protect the internal operations. For added safety, the Model 25 Non-Friction operates at 16 FPM.

## D IMENSIONAL DATA ~Quest and Nose Mount Chairs~



## Designer Notes:

- Minimum first row height: 10 ".
- Minimum row rise: $4^{4}$ (see Designer Notes on pages 4 and 6 for minimum row rise with chairs).
- Minimum closed depth: $4^{\prime}-1$ " for Quest chairs, $5^{\prime}-9$ " for Nose Mounted chairs (based on $366^{\prime \prime}$ row spacing).
- Deck elevations are determined by multiplying the number of rows by the row rise.
- The first row heights are based on numbers divisible by the row rise for code uniformity ( 8 " rise is based on 16 " first row height).
- Open depth dimensions do not include the front step.
- Closed depth may be increased by movable, forward fold or free standing units, higher rows, non-friction power, columns or rear filler boards. Please contact the factory for additional information.
- Add 2 " to the overall height for Recessed seating.
- Overall height does not include the chair.
- Contact the factory for projects requiring Quest chairs and bench seating combined.

| ROW | OVERALL HEIGHT |  |  |  | OPEN DIMENSIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10" RISE ( 25 cm ) | 12" RISE ( 30 cm ) | 14" RISE ( 36 cm ) | 16" RISE ( 41 cm ) | 22" SPACING <br> ( 56 cm ) | 24" SPACING ( 61 cm ) | 26" SPACING ( 65 cm ) | 31" SPACING ( 79 cm ) | $\begin{aligned} & \text { 32" SPACING } \\ & (81 \mathrm{~cm}) \end{aligned}$ | 33" SPACING ( 84 cm ) |
| 3 | $3^{\prime} 0$ 1/4" (92cm) | $3^{\prime} 6^{\prime \prime} \quad(107 \mathrm{~cm})$ | $3^{\prime} 81 / 2^{\prime \prime} \quad(113 \mathrm{~cm})$ | $4^{\prime} 2^{\prime \prime} \quad(127 \mathrm{~cm})$ | $5^{\prime} 4^{\prime \prime} \quad(163 \mathrm{~cm})$ | $5^{\prime} 6^{\prime \prime} \quad(168 \mathrm{~cm})$ | $5^{\prime} 88^{\prime \prime} \quad(173 \mathrm{~cm})$ | $6^{\prime} 8^{\prime \prime} \quad(203 \mathrm{~cm})$ | $6^{\prime} 9^{\prime \prime} \quad(206 \mathrm{~cm})$ | $6^{\prime} 10 \prime \prime(208 \mathrm{~cm})$ |
| 4 | $3^{\prime} 101 / 4^{\prime \prime} \quad(117 \mathrm{~cm})$ | $4^{\prime} 6^{\prime \prime} \quad(137 \mathrm{~cm})$ | 4' 10 1/2" (149cm) | $5^{\prime} 66^{\prime \prime} \quad(168 \mathrm{~cm})$ | 7' 2" (218cm) | $7^{\prime} 6^{\prime \prime} \quad(229 \mathrm{~cm})$ | $7^{\prime} 10^{\prime \prime}(239 \mathrm{~cm})$ | $9^{\prime} 3^{\prime \prime} \quad(282 \mathrm{~cm})$ | $9^{\prime} 5^{\prime \prime} \quad(287 \mathrm{~cm})$ | $9^{\prime} 7{ }^{\prime \prime} \quad(292 \mathrm{~cm})$ |
| 5 | $4^{\prime} 81 / 4^{\prime \prime} \quad(143 \mathrm{~cm})$ | $5^{\prime} 6^{\prime \prime} \quad(168 \mathrm{~cm})$ | $6^{\prime} 01 / 2^{\prime \prime} \quad(184 \mathrm{~cm})$ | $6^{\prime} 10^{\prime \prime} \quad(208 \mathrm{~cm})$ | $9^{\prime} 00^{\prime \prime} \quad(274 \mathrm{~cm})$ | $9^{\prime} 6^{\prime \prime} \quad(290 \mathrm{~cm})$ | $10^{\prime} 00^{\prime \prime}(305 \mathrm{~cm})$ | $11^{\prime} 10{ }^{\prime \prime}(361 \mathrm{~cm})$ | $12^{\prime \prime} 1^{\prime \prime}(368 \mathrm{~cm})$ | 12' 4" $(376 \mathrm{~cm})$ |
| 6 | $5^{\prime} 61 / 4^{\prime \prime} \quad(168 \mathrm{~cm})$ | $6^{\prime} 6{ }^{\prime \prime} \quad(198 \mathrm{~cm})$ | $7^{\prime} 21 / 2^{\prime \prime} \quad(220 \mathrm{~cm})$ | 8' 2" (249cm) | $10^{\prime} 10^{\prime \prime}(330 \mathrm{~cm})$ | 11' 6" $(351 \mathrm{~cm})$ | 12' 2" ( 371 cm ) | 14' $5^{\prime \prime}$ ( 439 cm ) | 14' 9" $(450 \mathrm{~cm})$ | 15'1" (460cm) |
| 7 | $6^{\prime} 41 / 4^{\prime \prime} \quad(194 \mathrm{~cm})$ | $7^{\prime} 6^{\prime \prime} \quad(229 \mathrm{~cm})$ | $8^{\prime} 41 / 2^{\prime \prime} \quad(255 \mathrm{~cm})$ | $9^{\prime} 6{ }^{\prime \prime} \quad(290 \mathrm{~cm})$ | 12' 8" (386cm) | $13^{\prime} 6^{\prime \prime}(411 \mathrm{~cm})$ | 14'4" (437cm) | $17^{\prime} 00^{\prime \prime}(518 \mathrm{~cm})$ | $17^{\prime} 5^{\prime \prime}(531 \mathrm{~cm})$ | $17^{\prime} 10 \prime(544 \mathrm{~cm})$ |
| 8 | $7^{\prime} 21 / 4^{\prime \prime} \quad(219 \mathrm{~cm})$ | $8^{\prime} 6^{\prime \prime} \quad(259 \mathrm{~cm})$ | $9^{\prime} 61 / 2^{\prime \prime} \quad(291 \mathrm{~cm})$ | 10' $10^{\prime \prime}(330 \mathrm{~cm})$ | 14' 6" (442cm) | 15' 6" (472cm) | $16^{\prime} 6^{\prime \prime}(503 \mathrm{~cm})$ | 19'7" (597cm) | 20'1" (612cm) | 20' 7 " ( 627 cm ) |
| 9 | $8^{\prime} 01 / 4^{\prime \prime} \quad(244 \mathrm{~cm})$ | $9^{\prime} 6^{\prime \prime} \quad(290 \mathrm{~cm})$ | 10' $81 / 2^{\prime \prime} \quad(326 \mathrm{~cm})$ | $12^{\prime} 2^{\prime \prime} \quad(371 \mathrm{~cm})$ | 16' $4^{\prime \prime}$ (498cm) | $17^{\prime} 6^{\prime \prime}(533 \mathrm{~cm})$ | $18^{\prime \prime} 8^{\prime \prime}(569 \mathrm{~cm})$ | $22^{\prime} 2$ 2 ( 676 cm ) | $22^{\prime \prime} 9$ (693cm) | $23^{\prime} 4^{\prime \prime}(711 \mathrm{~cm})$ |
| 10 | 8' 10 1/4" (270cm) | $10^{\prime} 6{ }^{\prime \prime}(320 \mathrm{~cm})$ | 11' 10 1/2" (362cm) | $13^{\prime} 6^{\prime \prime} \quad(411 \mathrm{~cm})$ | 18' $2^{\prime \prime}(554 \mathrm{~cm})$ | 19' 6" (594cm) | $20^{\prime} 10 ⿱ ㇒ 0^{\prime \prime}(635 \mathrm{~cm})$ | $24^{\prime \prime} 9^{\prime \prime}(754 \mathrm{~cm})$ | $25^{\prime \prime} 5^{\prime \prime}(775 \mathrm{~cm})$ | $26^{\prime \prime} 1^{\prime \prime}(795 \mathrm{~cm})$ |
| 11 | $9^{\prime} 81 / 4{ }^{\prime \prime} \quad(295 \mathrm{~cm})$ | $11^{\prime \prime} 6^{\prime \prime}(351 \mathrm{~cm})$ | $13^{\prime} 01 / 2^{\prime \prime}(398 \mathrm{~cm})$ | 14' $10^{\prime \prime}(452 \mathrm{~cm})$ | $20^{\prime \prime} 01(610 \mathrm{~cm})$ | $21^{\prime \prime} 6^{\prime \prime}(655 \mathrm{~cm})$ | $23^{\prime \prime} 0$ ( 701 cm ) | $27^{\prime \prime} 4^{\prime \prime}(833 \mathrm{~cm})$ | $28^{\prime \prime} 1^{\prime \prime}(856 \mathrm{~cm})$ | $28^{\prime} 10$ " 879 cm ) |
| 12 | 10' $61 / 4^{\prime \prime}$ (321cm) | $12^{\prime} 66^{\prime \prime}(381 \mathrm{~cm})$ | 14' $21 / 2^{\prime \prime}(433 \mathrm{~cm})$ | 16' $2^{\prime \prime}$ (493cm) | 21' 10 " (665cm) | $23^{\prime \prime} 6^{\prime \prime}(716 \mathrm{~cm})$ | 25' 2" (767cm) | $29^{\prime} 11{ }^{\prime \prime}(912 \mathrm{~cm})$ | 30' 9"' $(937 \mathrm{~cm})$ | $31^{\prime} 7$ " $(963 \mathrm{~cm})$ |
| 13 | 11' $41 / 4^{\prime \prime}(346 \mathrm{~cm})$ | $13^{\prime} 6^{\prime \prime}(411 \mathrm{~cm})$ | $15^{\prime} 41 / 2^{\prime \prime} \quad(469 \mathrm{~cm})$ | $17^{\prime} 6^{\prime \prime} \quad(533 \mathrm{~cm})$ | 23' 8" (721cm) | $25^{\prime} 6^{\prime \prime}$ (777cm) | $27^{\prime \prime} 4^{\prime \prime}(833 \mathrm{~cm})$ | $32^{\prime} 66^{\prime \prime}(991 \mathrm{~cm})$ | $33^{\prime} 5^{\prime \prime}(1019 \mathrm{~cm})$ | $34^{\prime} 4^{\prime \prime}(1046 \mathrm{~cm})$ |
| 14 | $12^{\prime} 21 / 4^{\prime \prime}(371 \mathrm{~cm})$ | $14^{\prime} 66^{\prime \prime}(442 \mathrm{~cm})$ | 16' $61 / 2^{\prime \prime}(504 \mathrm{~cm})$ | 18' $10^{\prime \prime}(574 \mathrm{~cm})$ | 25' 6" (777cm) | $27^{\prime \prime} 6$ " $(838 \mathrm{~cm})$ | $29^{\prime \prime} 6$ " (899cm) | $35^{\prime} 1{ }^{\prime \prime}(1069 \mathrm{~cm})$ | $36^{\prime} 1^{\prime \prime}(1100 \mathrm{~cm})$ | $37^{\prime} 1^{\prime \prime}(1130 \mathrm{~cm})$ |
| 15 | $13^{\prime} 01 / 4^{\prime \prime} \quad(397 \mathrm{~cm})$ | $15^{\prime} 6^{\prime \prime}(472 \mathrm{~cm})$ | 17' $81 / 2^{\prime \prime}(540 \mathrm{~cm})$ | $20^{\prime} 2^{\prime \prime} \quad(615 \mathrm{~cm})$ | $27^{\prime \prime} 4^{\prime \prime}(833 \mathrm{~cm})$ | $29^{\prime \prime} 6^{\prime \prime}(899 \mathrm{~cm})$ | $31^{\prime \prime} 8$ " $(965 \mathrm{~cm})$ | $37^{\prime} 8^{\prime \prime}(1148 \mathrm{~cm})$ | $38^{\prime \prime} 9^{\prime \prime}(1181 \mathrm{~cm})$ | $39^{\prime} 10^{\prime \prime}(1214 \mathrm{~cm})$ |
| 16 | $13^{\prime} 10$ 1/4" (422cm) | $16^{\prime} 66^{\prime \prime}(503 \mathrm{~cm})$ | 18' 10 1/2" ${ }^{\prime \prime}(575 \mathrm{~cm}$ ) | 21' 6 " (655cm) | 29' 2" (889cm) | $31^{\prime \prime} 6$ " $(960 \mathrm{~cm})$ | $33^{\prime} 10 \prime$ (1031 cm$)$ | 40' $3^{\prime \prime}$ ( 1227 cm ) | 41' 5" (1262cm) | 42' $7^{\prime \prime}$ (1298cm) |
| 17 | $14^{\prime} 81 / 4^{\prime \prime}(448 \mathrm{~cm})$ | $17^{\prime} 6^{\prime \prime}(533 \mathrm{~cm})$ | 20'01/2" (611cm) | 22' 10 " (696cm) | $31^{\prime} 00^{\prime \prime}(945 \mathrm{~cm})$ | $33^{\prime} 6^{\prime \prime}(1021 \mathrm{~cm})$ | $36^{\prime} 0^{\prime \prime}$ (1097cm) | 42' $10^{\prime \prime}(1306 \mathrm{~cm})$ | $44^{\prime} 1^{\prime \prime}(1344 \mathrm{~cm})$ | $45^{\prime} 4^{\prime \prime}(1382 \mathrm{~cm})$ |
| 18 | $15^{\prime} 61 / 4^{\prime \prime}(473 \mathrm{~cm})$ | $18^{\prime \prime} 6^{\prime \prime}(564 \mathrm{~cm})$ | 21'2 1/2" (646cm) | 24' $\mathbf{2}^{\prime \prime} \quad(737 \mathrm{~cm})$ | $32^{\prime} 10$ " (1001cm) | 35' 6" (1082 cm) | $38^{\prime} 2^{\prime \prime}(1163 \mathrm{~cm})$ | 45' $5^{\prime \prime}$ ( 1384 cm ) | 46' 9" $(1425 \mathrm{~cm})$ | 48' $1^{\prime \prime}$ (1466 cm) |
| 19 | 16' $41 / 4^{\prime \prime}$ ( 498 cm ) | $19^{\prime} 6^{\prime \prime}(594 \mathrm{~cm})$ | $22^{\prime} 41 / 2^{\prime \prime} \quad(682 \mathrm{~cm})$ |  | 34' 8" $\quad$ (1057cm) | $37^{\prime} 6^{\prime \prime}(1143 \mathrm{~cm})$ | $40^{\prime} 4^{\prime \prime}(1229 \mathrm{~cm})$ | 48' 0 " $(1463 \mathrm{~cm})$ | 49' 5" $(1506 \mathrm{~cm})$ | $50^{\prime} 10^{\prime \prime}(1549 \mathrm{~cm})$ |
| 20 | 17' $21 / 4^{\prime \prime}(524 \mathrm{~cm})$ | $20^{\prime} 6{ }^{\prime \prime}(625 \mathrm{~cm})$ | 23' $61 / 2^{\prime \prime} \quad(718 \mathrm{~cm})$ |  | $36^{\prime} 6{ }^{\prime \prime}(1113 \mathrm{~cm})$ | $39^{\prime} 6^{\prime \prime}(1204 \mathrm{~cm})$ | 42' 6" (1295cm) | 50' $7^{\prime \prime}$ ( 1542 cm ) | $52^{\prime \prime} 1^{\prime \prime}(1588 \mathrm{~cm})$ | $53^{\prime} 7^{\prime \prime}(1633 \mathrm{~cm})$ |
| 21 | $18^{\prime} 01 / 4^{\prime \prime}$ ( 549 cm ) | $21^{\prime \prime} 6^{\prime \prime}(655 \mathrm{~cm})$ | 24' $81 / 2^{\prime \prime} \quad(753 \mathrm{~cm})$ |  | $38^{\prime} 4^{\prime \prime}(1168 \mathrm{~cm})$ | $41^{\prime} 6^{\prime \prime}(1265 \mathrm{~cm})$ | 44' 8' $(1361 \mathrm{~cm})$ | $53^{\prime} 2^{\prime \prime}(1621 \mathrm{~cm})$ | 54' 9" (1669cm) | $56^{\prime} 4^{\prime \prime}(1717 \mathrm{~cm})$ |
| 22 | 18' 10 1/4" ( 575 cm ) | $22^{\prime \prime} 6^{\prime \prime}(686 \mathrm{~cm})$ |  |  | 40' 2" (1224cm) | $43^{\prime} 6^{\prime \prime}(1326 \mathrm{~cm})$ | 46' $10^{\prime \prime}(1427 \mathrm{~cm})$ | 55' 9" (1699 cm) | $57^{\prime} 5^{\prime \prime}(1750 \mathrm{~cm})$ | 59' 1" (1801cm) |
| 23 | 19'8 1/4" $(600 \mathrm{~cm})$ | $23^{\prime} 6^{\prime \prime}(716 \mathrm{~cm})$ |  |  | 42' 0" (1280cm) | $45^{\prime} 6^{\prime \prime}(1387 \mathrm{~cm})$ | $49^{\prime} 0^{\prime \prime}(1494 \mathrm{~cm})$ | $58^{\prime} 4^{\prime \prime}(1778 \mathrm{~cm})$ | 60' $1^{\prime \prime}$ (1831 cm) | 61' 10 "(1885 cm) |
| 24 | 20' $61 / 4^{\prime \prime}$ (625cm) | $24^{\prime} 66^{\prime \prime}(747 \mathrm{~cm})$ |  |  | $43^{\prime} 10^{\prime \prime}(1336 \mathrm{~cm})$ | $47^{\prime} 6^{\prime \prime}$ (1448cm) | 51' 2" (1560cm) | 60' $11^{\prime \prime}(1857 \mathrm{~cm})$ | 62' 9" (1913cm) | 64' $7^{\prime \prime}$ (1969 cm) |
| 25 | 21'4 1/4" (651cm) | $25^{\prime \prime} 6^{\prime \prime}(777 \mathrm{~cm})$ |  |  | 45' 8" (1392cm) | 49' 6" (1509cm) | $53^{\prime} 4^{\prime \prime}(1626 \mathrm{~cm})$ | $63^{\prime \prime} 6^{\prime \prime}(1935 \mathrm{~cm})$ | 65' 5" (1994cm) | 67' 4" 2052 cm ) |
| 26 | 22' $21 / 4^{\prime \prime} \quad(676 \mathrm{~cm})$ |  |  |  | $47^{\prime} 6{ }^{\prime \prime} \quad(1448 \mathrm{~cm})$ | 51' 6" 1570 cm ) | 55' 6" (1692cm) | 66' $1^{\prime \prime}(2014 \mathrm{~cm})$ | 68' $1^{\prime \prime}(2075 \mathrm{~cm})$ | $70^{\prime} 1^{\prime \prime}(2136 \mathrm{~cm})$ |
| 27 | $23^{\prime} 01 / 4^{\prime \prime} \quad(702 \mathrm{~cm})$ |  |  |  | 49' 4" 1 (1504cm) | $53^{\prime} 6^{\prime \prime}(1631 \mathrm{~cm})$ | $57^{\prime} 8^{\prime \prime}(1758 \mathrm{~cm})$ | 68' $8^{\prime \prime}(2093 \mathrm{~cm})$ | $70^{\prime} 9^{\prime \prime}(2156 \mathrm{~cm})$ | $72^{\prime} 10^{\prime \prime}(2220 \mathrm{~cm})$ |
| 28 | 23' 10 1/4" (727cm) |  |  |  | 51'2" (1560cm) | 55' 6" (1692cm) | 59' 10 "(1824cm) | $71^{\prime} 3^{\prime \prime}(2172 \mathrm{~cm})$ | $73^{\prime \prime} 5^{\prime \prime}(2238 \mathrm{~cm})$ | $75^{\prime} 7^{\prime \prime}(2304 \mathrm{~cm})$ |
| 29 | 24' $81 / 4^{\prime \prime} \quad(752 \mathrm{~cm})$ |  |  |  | $53^{\prime} 0{ }^{\prime \prime} \quad(1615 \mathrm{~cm})$ | $57^{\prime} 6^{\prime \prime}(1753 \mathrm{~cm})$ | 62' $0^{\prime \prime}$ (1890 cm) | $73^{\prime} 10^{\prime \prime}(2250 \mathrm{~cm})$ | $76^{\prime \prime} 1^{\prime \prime}(2319 \mathrm{~cm})$ | $78^{\prime} 4^{\prime \prime}(2388 \mathrm{~cm})$ |
| 30 | 25' $61 / 4^{\prime \prime} \quad(778 \mathrm{~cm})$ |  |  |  | $54^{\prime} 10^{\prime \prime}(1671 \mathrm{~cm})$ | $59^{\prime} 6^{\prime \prime}(1814 \mathrm{~cm})$ | 64' 2" (1956cm) | $76^{\prime} 5^{\prime \prime}(2329 \mathrm{~cm})$ | 78' 9" $(2400 \mathrm{~cm})$ | 81'1" (2471cm) |

## Designer Notes:

- Minimum closed depth: $3^{\prime}-6$ " for $22^{\prime \prime}-26^{\prime \prime}$ spacing, $4^{\prime}-1$ " for $31^{\prime \prime}-33^{\prime \prime}$ spacing.
- Open depth dimensions do not include the front step.
- Deck elevations are determined by multiplying the number of rows by the row rise.
- Closed depth may be increased by movable, forward fold or free standing units, higher rows, non-friction power, columns or rear filler boards. Please contact the factory for additional information.
- Add 2 " to the overall height for Recessed bleachers.


## Wimu cunk ortones

Designing a one dimensional seating system to meet the ever-changing needs of today's facility is virtually impossible. The Irwin Telescopic Systems offer three concepts to providing wheel chair accessible seating throughout the first row.


It is recommended that the Modular Deck Units be arranged to allow for wheel chair and companion seating at all times.

Individual wheel chair notches can be provided in single or double spaces creating a designated area for a wheel chair as well as an adjacent companion seat. Individual spaces can be permanent or recoverable. Railings shown are optional.

Full section length truncations allow space for team seating or large quantities of wheel chairs. Truncated areas can be permanent or recoverable. Railings shown are optional.

The Modular Deck Units (MDU) quickly and easily adapt for complete first row seating, areas for wheel chairs and companion seating, truncations for team seating, or any combination. All MDU sections are manually opened and closed and do not require front rails by most building codes. Contact the factory for further details.

Irwin Telescopic Seating Company P.O. Box 320

Altamont, IL 62411
Phone: 618-483-6157
Fax: 618-483-5539
E-mail: sales@irwintelescopicseating.com
www.irwintelescopicseating.com

## Irwin do Brasil Ltda

Rua Dr. Rubens Gomes Bueno, 691
04730-903 Sao Paulo, Brazil
Phone: 55-11-5643-2931
Fax: 55-11-5641-5594
E-mail: irwin@giroflex.com.br

World Headquarters Irwin Seating Company
P.O. Box 2429 (zip 49501) 3251 Fruit Ridge Ave. NW Grand Rapids, MI 49544
Sales Office: 616-574-7400
Fax: 616-574-7411
E-mail: sales@irwinseating.com www.irwinseating.com

Irwin Seating (Europe) S.L.
Apartado 262
08720 Vilafranca del Penedes (Barcelona)
Spain
Phone: 34-93-890-57-87
Fax: 34-93-890-65-01
E-mail: estevef@irwineurope.com

Irwin Seating (Wuxi) Company Ltd.
Block A/B, Lot 27
Long Shan Road \#1
Wuxi New District
Wuxi, Jiangsu 214028
China
Phone: 86-510-8521-8050
Fax: 86-510-8521-8070
E-mail: mail@irwinseating.com.cn

Irwin Seating Company Regional Office
9 Lorong Batai Tepi
Damansara Heights 50490 Kuala Lumpur Malaysia
Phone: 603-2096-1677
Fax: 603-2096-2677
E-mail: nwilborg@tm.net.my

