

**AIST** Promoting safety and technical excellence in Irish Theatre  
Association of Irish Stage Technicians

## AIST & Venue TM Group Theatre Seating Presentation



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### Notes:

- This presentation is about asking the questions and pointing out the options, rather than giving any particular solution for a single space. The aim is to provide everyone with a toolkit to apply to their own venue.
- Each theatre space will need to assess their own unique seat layout, in the context of their own booking patterns, audience profile and programme aspirations.
- The lobby will generally be more challenging to the capacity than the seating in a theatre. The capacity of a given building will be a combination of seating options within the limits of the building as a whole.
- The lobby throughput, will require significant separate work. It may be necessary to direct the patrons directly from the front door to their seats, without using lobby facilities (except toilets).
- Access seating will still need to be maintained at the existing percentage.

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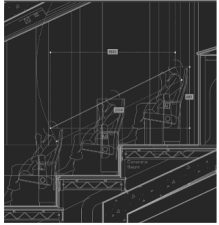
### Some definitions and terms:

- Buffer seats – the seats deliberately left empty for distancing compliance.
- Buffer ratio – the ratio generated by the number of buffer seats required around a given booking, and the number of seats in the booking.
- Seat-way – the path between the seats of a row and the backs of the seats of the row in front
- Gang-way – a route through the auditorium which runs side to side and is filled from seat-ways or aisles.
- Aisle – a route through the auditorium which runs from front to back, and is filled from seat-ways or gang-ways.
- Seat-way depth – the distance from the front of one seat to the back of the seat in front (critical in the calculation of permitted row length, and important in how comfortable passing will feel for the patron).
- Row depth – the distance from the centre of one seat to the centre of a seat in the row in-front or behind. Essential in the calculation of distancing requirements.
- Seat width – the distance from the centre of one seat to the centre of an adjacent seat in the same row. Essential in the calculation of distancing requirements.

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### Raked seating:

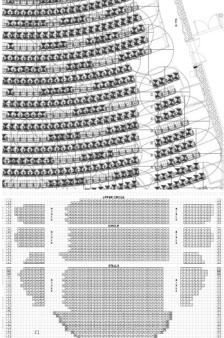
- Distance taken on the horizontal, or on the diagonal.
- Notes on airflow affecting horizontal vs diagonal discussions.
- Some practical experiments with a garden mist sprayer.



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### Methods of drafting the plan:

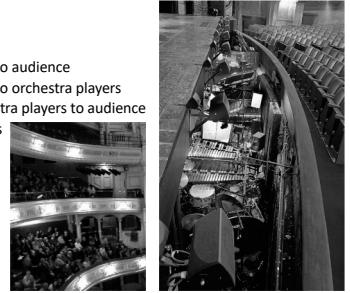
- CAD, scale plans on paper, in-person with a tape.
- It must be based on the real world – it's impossible to use a representative seat map (e.g. excel seat map)
- Seat centre to centre (Currently 2m, be prepared for other measurements).
- Working around the fixed points of doors, leading edges and access seating.



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### Leading edges:


- Distancing from stage to audience
- Distancing from stage to orchestra players
- Distancing from orchestra players to audience
- Front rows of balconies
- Boxes



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### Implementing buffer seats:

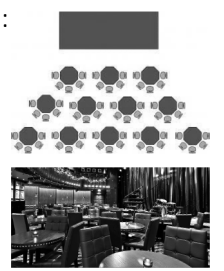
- Problems with patrons moving seats or sitting in the wrong seats
- Problems with patrons using buffer seats for bags, coats, etc. thus circumventing flip-up mechanisms required for fire egress.
- Removal of entire seat
- Removal of seat plate
- Covering (NB fire load)
- Tying shut.
- Speed of turn around – if using a flexible map.



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### Cabaret & loose chair models:

- Compatibility with fire cert for the building
- Compatibility with the public licencing for the building.
- Mitigating against furniture movement during fire evacuation.
- Mitigating against furniture movement during ingress, performance, and egress.
- Managing expectations of bringing alcohol into the performance space in a cabaret model, and the VAT implications.
- Sightline implications, disturbance of patron movement during a performance.
- Table service (subject to VAT) eases pressure on bar queuing and lobby space.
- Patrons may be more prone to distribute toilet use throughout their stay, rather than just at the interval



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### Intervals:

- Intervals should be assessed in terms of lobby and toilet capacity, however keep in mind the duty of care to the patrons post show. You may have to cater for just as many patrons wishing to use the toilet after the show as you would for an interval (but without the bar revenue).
- Other methods for reducing pressure on lobby space and toilets such as very long intervals (e.g. 30 minutes) may or may not work with your audience profile.
- Hawker and tray service (subject to VAT if alcohol) through empty rows, and keeping the bars closed to patrons, may lessen the movement of patrons out of the seats during the interval.

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### Use every door:

- Consider if it is possible to utilise emergency exits from the auditorium for ingress and egress.
- Ticket scanners can be added to alternate doors to relieve pressure on the main door.
- Egress (dealt with later) needs to be managed, and having more doors is clearly useful in this planning.
- There are security and staff levels to be address by opening more doors into the building.
- Keep in mind exterior crowd management and the possibility of disorientation when patrons leave by a different door. This may lead to a level of malcontent and complaints.

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### Queueing within the Auditorium:

- Toilet entrances within the auditorium.
- Killing row ends to allow for queueing.
- Increasing aisle widths via seat removal to allow for queueing in the aisles.
- Retail kiosks.
- Hawkers.

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### Policies – based on your audience profile:

- Late admission and re-admission
- Egress systems
- Passing
- Mitigating lobby congestion

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### Admissions Policies:

- Late admissions
- Re-admissions (e.g. Toilet use), to the same seat, or a seat by the door.
- Increased passing in the seat-way
- Loss of gross potential through keeping seats back for late admissions or re-admissions.
- Increased patron complaints due to passing, refusal of admission, and admission only to a different seat.
- Patron communication about re-admission, stopping patrons coming out "looking for" patrons sent to other seats.

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### Egress systems:

- Keeping patrons seated at the end of the performance
- Announcements & signage.
- Keeping ushers safe within the auditorium during egress.
- Row by row egress models.
- Aisle to centre egress models.
- Egress in a cabaret model.
- Utilising emergency exit doors.

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### Discussion about passing:

- In the event of the HSE carrying out contact tracing on a patron, they will want to know all of the "close contacts" which the patron had over range of days, before the onset of symptoms.
- The HSE define a close contact, as within 2m for a period of 15 minutes.
- Passing in the seat-way – actual contact.
- Passing in the gangway or aisle
- Passing in a cabaret model – protocols for a patron coughing or sneezing onto another patron's table.
- One way systems may be required.
- Be aware of when passing turns into queuing, stopping and congestion, at which point it is building up to a close contact and is no longer acceptable.

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### Mitigating lobby congestion:

- Are you going to open the bar?
- Queuing for the bar, the auditorium, and the toilets.
- Opening the auditorium at the same time as the lobby doors
- Tray service within the auditorium – VAT implications, and increased staff contact repercussions. (Only really possible if there are fully empty rows between all occupied rows).
- Staggered arrival times issued to patrons.

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### Pros and Cons of styles of seating layout:

- Distancing 2m, 1.5m, 1m etc.
- Individuals or Groups
- Allocation
- Layout
- Row interaction
- Ingress systems
- Caps

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### Planning for 2m distancing

The current guidelines for distancing

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Good if you think you are going to open sooner rather than later</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• May very quickly become a futile exercise as changes are made to guidelines</li> </ul>
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### Planning for other distancing

There are strong indications that distancing requirements may be changed, but no timescale is evident yet.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Potentially has more lifespan as guidelines are prone to change</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Could find yourself being asked to produce 2m package at short notice if opening is desired before guidelines change.</li> </ul>
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### Household group spacing

Seating individuals from a group who claim to be from the same household, with no distancing between the members of the group. Distancing is maintained from one group to any adjacent groups.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Likely to produce increased occupation.</li> <li>• Likely to produce a better customer experience, due to proximity to family.</li> <li>• Likely to produce a better performer experience from an increase sense of "fullness" in the auditorium</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• More complicated booking processes.</li> <li>• More likely to need fixed maps in larger venues.</li> <li>• Likely to result in higher workloads for box office staff.</li> <li>• For effective use, there is a requirement for a large amount of research into historical booking data, to reveal group size patterns for various production types.</li> <li>• Not friendly with online patron seat choice booking systems.</li> </ul>
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### Individual spacing

Seating every individual patron with distancing from all adjacent patrons, regardless of household group status.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Very simple booking system changes.</li> <li>• Compatible with online patron seat choice systems.</li> <li>• No change in box office workload.</li> <li>• No historical booking data research required.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Likely to result in a lower occupation level.</li> <li>• Likely to produce a poorer audience experience through isolation.</li> <li>• Likely to produce a poorer performer experience through stripes of empty seats.</li> </ul>
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### Allocated at booking into a fixed map

When bookings are taken and seat numbers are allocated at the time of booking, from a fixed map (i.e. that all buffer seats are pre-killed before going on sale).

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Lowest workload for box office and ticketing systems. Bookings are simply taken onto a standard map with kills blocked off during map build.</li> <li>• Friendly to patron seat choice online booking systems.</li> <li>• Works very well with individual spacing models (see below)</li> <li>• High degree of certainty of distancing compliance</li> <li>• Buffer seats can be permanently removed from use to prevent patrons moving or clogging up escape routes with bags and coats.</li> <li>• Works well with interdependent row models (see below)</li> <li>• Suits large venues or venues with complicated seat layouts, looking to maximise occupancy.</li> <li>• Suits high demand performances where booking are expected to sell out with over demand.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• May lead to lack of choice in group models (see below), when groups of a particular size are sold out.</li> <li>• Requires more research of historical booking data per production type for group models. To generate percentages of group sizes per production type.</li> <li>• Could lead to accusations of profiteering, in group models, if small size groups or individuals are forced to book larger amounts of seats.</li> <li>• Could lead to loss of gross potential in group models, if small groups are allowed to use only part of a larger group.</li> </ul>
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### Allocated at booking into a flexible map

When bookings are taken and seat numbers are allocated at the time of booking, into a flexible map. (i.e. that buffer seats are added around each booking – at the time of booking, manually).

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• The most likely system to maximise occupancy.</li> <li>• The most friendly system to public relations and customer satisfaction.</li> <li>• Suits smaller venues with uncomplicated seating layouts.</li> <li>• Suits full time local experienced box office staff.</li> <li>• Works well with all models of patron distancing layout.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• The highest workload on box office at the time of booking.</li> <li>• More prone to human error mistakes resulting in non-compliance with distancing guidelines.</li> <li>• More prone to human error mistakes leading to missed gross potential.</li> <li>• Buffer kills need to be allocated by box office staff, in real time, with each booking.</li> <li>• Not friendly to online patron seat choice systems.</li> <li>• Not friendly to call centre box office staff, unfamiliar with the venue.</li> </ul>
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### Allocated between booking and FOH opening.

When bookings are taken up to a capacity number, and then separately at some point before opening lobby doors, patrons are allocated to seat numbers.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Low workload for box office at time of booking.</li> <li>• Works well with individual models.</li> <li>• Issues with overselling should be found in advance of patron arrival in the building.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• For group models, the possibility of loss of gross potential, by picking a capacity, if group size booking patterns differ from predictions.</li> <li>• For group models, the possibility of overselling a performance if group booking patterns differ from predictions. Thus running the risk of distancing non-compliance or turning patrons away with valid tickets.</li> </ul>
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### Unallocated.

When bookings are taken up to a capacity number, and only allocated into a seat during ingress into the auditorium, on a first come first served basis.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• No increased workload for box office at time of booking.</li> <li>• Works well with individual models.</li> <li>• Friendly to cabaret models (with only one size of table).</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Potential for high stress levels on usher staff during ingress.</li> <li>• Potential for a poor customer experience.</li> <li>• Potential for extremely high pressure on lobby space caused by queuing.</li> <li>• Early auditorium occupation more likely, which increases the likelihood of passing during the performance for toilet use.</li> <li>• For group models, the possibility of loss of gross potential, by picking a capacity, if group size booking patterns differ from predictions.</li> <li>• For group models, the possibility of overselling a performance if group booking patterns differ from predictions. This running the risk of distancing non-compliance or turning patrons away with valid tickets.</li> </ul>
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### Checker board layout.

Placing individuals or groups in a checkerboard pattern to utilise diagonal measurement rather than linear "up down / left right" distancing.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Often results in increased capacity</li> <li>• Can give audience members a greater sense of space, thus comfort, due to the increased distance to the patron directly in front of them.</li> <li>• Can give a greater sense of "fullness" to the performer, by reducing the large stripes of empty seats.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Can create row interdependency (see below)</li> </ul>
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### Grid layout.

Placing individuals or groups in a grid pattern, where by distancing is measured only on north south east and west axis (in plan) and not diagonal.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Can create row independency (See below)</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• May result in reduced capacity.</li> <li>• May result in a sense of closeness for audience members.</li> <li>• May be less attractive to performers, due to large stripes of empty seats.</li> </ul>
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### Row independency.

When the placement of patrons in one row has no effect on the placement of patrons in an adjacent row.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Makes booking allocation far easier.</li> <li>• Row occupation can be maximised more easily.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Depending on the seat-way depth, additional rows may need to be killed to achieve independency.</li> </ul>
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### Row interdependency.

When the placement of patrons in one row affects the placement of patrons in an adjacent row behind and in front.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• None, but tends to be associated with higher occupancy.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Makes allocation more complicated.</li> <li>• In group models, larger groups cause large amounts of buffer seats in other rows, which counter acts the more favourable buffer ratio of the larger groups.</li> </ul>
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### Loading Patrons Centre to Out

Calling patrons to their seats, centre seats first, aisle seats last.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Reduces passing within the seat-way.</li> <li>• Medium amount of passing in gang-ways and aisles.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Substantial increase in FOH management workload during ingress.</li> <li>• Puts the patrons in the furthest location from the toilets, in place earliest.</li> <li>• Latecomers and human nature will circumvent (late admission is a separate debate)</li> <li>• Substantial increase in pressure in lobby space</li> <li>• Less traditional and familiar theatre experience for patrons.</li> </ul>
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### Loading patrons row by row

Calling patrons to their seats, row by row.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Medium amount of passing in the seat-way.</li> <li>• Reduces passing in the gang-way and aisles.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• Substantial increase in FOH management workload during ingress.</li> <li>• Latecomers and human nature will circumvent (late admission is a separate debate)</li> <li>• Substantial increase in pressure in lobby space</li> <li>• Less traditional and familiar theatre experience for patrons.</li> </ul>
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### Patrons taking their seats in their own time.

Patrons taking their seats as they traditionally have, randomly, in their own time.

<p><b>Pros</b></p> <ul style="list-style-type: none"> <li>• Reduces pressure on lobby space.</li> <li>• Less queueing in the lobby.</li> <li>• Lower stress for usher and FOH management staff.</li> <li>• Less staff – patron physical interaction.</li> <li>• More familiar and traditional theatre experience for patrons.</li> <li>• Potentially sets a precedent of acceptance of passing within the patrons – reducing the problems caused by latecomers and toilet use mid-performance.</li> <li>• Reduced likelihood of having to ask patrons to step out of queues and hence clogging up door areas.</li> </ul>	<p><b>Cons</b></p> <ul style="list-style-type: none"> <li>• More passing in the aisles and gang-ways.</li> <li>• More passing in the seat-ways.</li> <li>• Possibility of increased patron complaints, from those more concerned about passing.</li> </ul>
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### Overriding Caps:

- In most theatres and venues, regardless of distancing, the hard cap will limit occupancy, before the distancing restrictions.
- 7<sup>th</sup> June (Indoor) Capped at 50 (made up of pods of up to 6), for Theatre and Cinemas gatherings. Other organised indoor events are not permitted (e.g. conference, business training, team building etc.)
- 7<sup>th</sup> June (Outdoor) Capped at 100 for most, and in fixed outdoor venues with a normal capacity of over 5000, capped at 200.
- July – Proposals TBC (Indoor), currently suggesting all organised indoor events (including Theatre and Cinema) may proceed at 50 capacity, and in “larger venues” at 100 capacity. The term “larger venue” is to be defined.
- July – Proposals TBC (Outdoor), currently suggesting 200 for most, and in fixed outdoor venues with a normal capacity of over 5000, capped at 500.
- August – Proposals “Further increases in the numbers permitted”.

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Many thanks for your time.