



Elevate the Golf Simulator Experience: Essential Considerations

By Dave Arnott

When building out a space for a golf simulator, several factors should be considered to ensure a high-quality experience. Here's what to keep in mind regarding space, projectors, screens, and overall needs:

1. Space Requirements

- **Ceiling Height:** Ensure the room has sufficient ceiling height (at least 9-10 feet) for a comfortable swing. Taller users or full swings require more space.
- **Room Size:** A typical recommendation is 15-18 feet in depth, 12-15 feet in width, and at least 9-10 feet in height. This allows for comfortable movement and ensures the simulator's performance is accurate.
- **Swing Area:** Make sure there is enough space for users to swing their clubs without hitting the walls, furniture, or other obstacles. Ideally, a 5 x 10 feet area should be clear for swinging.

2. Enclosure Considerations

- **Surround your Space:** The top and side barriers of an enclosure help contain stray golf balls that bounce off the screen, as well as mis-hits, ensuring optimal safety.
- **Safety and Durability:** The enclosure should be made from impact-resistant materials, such as heavy-duty padding and reinforced screens, to safely contain golf balls and prevent damage to walls or equipment.
- **Proper Size and Fit:** The enclosure should offer ample space for a full golf swing, with sufficient width, height, and depth to accommodate and ensure proper ball containment.
- **Clear Visibility and Easy Setup:** Ensure the enclosure allows unobstructed viewing of the screen and projector, while also being easy to set up, disassemble, and store, especially for portable or multi-use spaces.

3. Screen and Impact Protection

- **Golf Simulator Screen:** Choose a high-quality impact screen made from durable, non-stretchable material that can handle golf ball impacts. The screen should also offer clear, bright visuals for the projected image.
- **Screen Size:** The screen should be large enough to provide a good view of the simulation. Aim for at least 8-16 feet in width for a wide view of the course.
- **Protection Behind the Screen:** Use padding or a netting system behind the screen to prevent damage from stray balls and to improve safety.

4. Flooring and Hitting Mat Turf

- **Flooring:** A flat, even floor is essential for accurate data tracking. Consider using a synthetic turf mat or carpet designed for golf simulation. It helps mimic the feel of a real golf course.
- **Turf Mat:** The mat should be able to absorb impact and prevent damage to the floor. Look for mats that replicate the feel of grass and provide adequate traction.

5. Projector Placement

- **Projector Type:** Choose a high-resolution projector that offers clear images and vibrant colors for a realistic simulation experience. A projector with at least 4000 lumens is ideal for bright, crisp visuals. Additionally, consider projectors with wide zoom ranges for flexibility in adjusting the image size to fit your space. For more information on the ideal specifications for a golf simulator projector, see our thought leadership on: **Laser Projectors Perfectly Suited for an Immersive Golf Simulation** or **The Importance of Choosing the Right Projector in Golf Simulation**.



- **Placement Flexibility:** Opt for projectors with placement flexibility that allow you to position the projector in various locations, whether it be on the ceiling or a nearby surface. This ensures you can adjust for the specific layout of your simulator space. The ability to move and adjust the projector helps optimize the viewing experience, especially in tight or irregular spaces.
- **Projection Distance:** Ensure the projector is positioned at the correct distance from the screen to provide an optimal image size. Usually, this is around 10-20 feet away, depending on the projector's zoom capabilities and your room size. With a wide zoom range, you'll have the flexibility to fine-tune the image without needing to move the projector.
- **Advanced Geometric Correction:** Look for projectors with advanced geometric correction features, which allow for accurate image adjustment even if the projector is placed off-center or at an angle. This feature compensates for distorted images, ensuring that the simulation remains true to scale and visually appealing, regardless of projector placement.
- **Installation:** The projector should be installed on the ceiling or near the floor to avoid interference with swings and ensure the image is projected at the correct angle. For more information on installation options, see our thought leadership on: **Ceiling Installation vs. Floor Installation for Golf Simulators: Which is Right for Your Setup?**

6. Technology & Sensors

- **Tracking System:** Choose a reliable tracking system (e.g., infrared sensors, cameras, or radar) to capture the ball's trajectory and speed. Make sure the system is compatible with your needs, including Accuracy, Features and Budget.
- **Computer/Software:** A computer or console that runs golf simulation software is essential. Choose software that offers realistic courses and gameplay, and ensure your system meets the software's requirements.
- **7. Lighting and Ambient Conditions**
- **Lighting:** Proper lighting is essential for both the projector's visibility and the camera or sensor tracking. Avoid direct light shining onto the screen, as it can interfere with the accuracy of sensors.
- **Ambient Conditions:** The room should be well-ventilated and comfortable, with no excessive noise or distractions that could affect the golfing experience.

8. Additional Needs

- **Control center:** space needed for players to interact with Simulator software with a touch screen during play and provide wall space to secondary displays for shot & swing analytics.



- Seating and Comfort: Provide comfortable seating for players when they're not actively swinging. You may also want space for players to rest between rounds.
- Storage: Consider space for clubs, balls, tees, and other equipment.
- Sound System: If you want a more immersive experience, consider adding a sound system to mimic the atmosphere of a golf course.
- By paying attention to these factors, you can create an optimal space for enjoying your golf simulator while ensuring comfort, functionality, and safety.

References:

Baron. (2024) Discover How High Ceiling for Golf Simulator Needs to Be. <https://www.measuringknowhow.com/discover-how-high-ceiling-for-golf-simulator-needs-to-be/>

(2023) Ceiling Height for a Golf Simulator: What You Need to Know. <https://www.playbetter.com/blogs/golf/ceiling-height-for-a-garage-golf-simulator-what-you-need-to-know-before-buying>

About the author:

David Arnett is a National Accounts Manager at Sharp Imaging and Information Company of America where he supports AV Consultants, provides product expertise, and offers integral sales support. David also serves as a liaison between Sharp, consulting/integration organizations and end users. David has a breadth of experience and encompasses more than 25 years in the A/V industry. David is an avid golfer with a 12 handicap. He plays in several virtual golf tournaments and enjoys blending this passion for golf and expertise in display technology.

For additional information about Sharp products, visit www.sharppusa.com and follow @SharpBusiness on our social media channels: LinkedIn, Facebook, Instagram, Twitter and YouTube.