

NATIONAL GYMNASTICS FACILITIES GUIDE

Disclaimer: The Gymnastics in Australia National Facilities Guidelines contains comments of a general nature only and is not intended to be relied upon as a substitute for professional advice. Gymnastics Australia Limited and its affiliated State and Territory Associations will not be responsible for any loss or damage suffered by any entity or person doing anything, or failing to do anything, as a result of any material in this document. Any opinions, findings, conclusions or recommendations expressed in this resource are guidelines only and should not be expressly relied upon.

Gymnastics Australia acknowledge the Traditional Owners and custodians of the lands on which we live, work and participate in gymnastics. We recognise the continuing connection to land, waters and culture of the Indigenous community and pay our respects to their Elders past, present and emerging.

CONTENTS

Foreword	2	Facility Planning Guidance	20	Activity Area Guidance.....	40
Introduction	3	Building Regulations	21	Introduction	41
About the NFG	3	Accessibility	22	Common Issues and Oversight	42
Using the Guidelines	4	Universal Design Principles	24	Notice and Acceptance of Risk	44
Guiding Principles	5	OH&S and Safe Design	25	Risk Assessment	45
What is Gymnastics?	6	Manual Handling	26	Levels of Expected Performance	46
One Sport - Many Disciplines	7	Crime Prevention	27	Inspections and Maintenance	47
Benefits of Gymnastics	9	Child Safety	28	Staff Education and Training	48
Participation Trends	10	Environmentally Sustainable Design ...	29	Record Keeping and Accountability	48
National Facility Hierarchy	11	Entrance and Circulation Space	30	Apparatus Layout	48
Facility Planning Process	18	Logistics and Loading Zones	31	Anchor Points and Floor Plates	49
		Acoustics Design	32	Support Cables	49
		Car Parking and Traffic	34	Ceiling Heights & Clearances	50
		First Aid Rooms	35	Foam Pits	52
		Lighting	36	Schedule of Provision	55
				Ancillary Ammenities	56
				Concept Plans.....	61
				Introduction	62
				Functional Relationship Diagram	64
				Facility Concepts	65
				Acknowledgements	69
				Sources and Resources	70

This guide was originally published in 2022 by Gymnastics Australia, and has been updated in 2025 by Gymnastics NSW.

FOREWORD

As community awareness about the importance of fundamental movement and literacy grows, gymnastics' role in developing physical literacy, particularly in our children, has become increasingly recognised. We need to ensure our network of gymnastics clubs and facilities throughout Australia provide the welcoming, inclusive, safe and engaging environments that parents and children seek.

The development of these National Facilities Guidelines – a document that details Gymnastics Australia's (GA) and its affiliated State and Territory Associations' preferred standards for gymnastics facilities- will support gymnastics clubs and other stakeholders with the provision, improvement and enhancement of gymnastics facilities across Australia.

Through a consultation process, a Project Steering Committee, and Technical Reference Panel (consisting of state and national representatives, event and coaching staff, gymnastics club owners and managers, architects, and gymnastics equipment suppliers), we have developed this comprehensive gymnastics facility guide.

This resource is one that aims to align our planning and development objectives for facilities with that of our government, community, and industry partners. Importantly, these guidelines are designed to complement and support each facility's strategies, and plans developed by Gymnastics Australia and its affiliated State and Territory Associations.

Although we are very proud of this document, we also acknowledge that the guidelines will need to be refined and updated over time as our sport evolves, and we are committed to doing so. We welcome feedback from key stakeholders and members at all levels of our sport.

We look forward to your continued support as we work together to foster a fun, safe and welcoming environment of movement, where all participants are empowered to achieve their personal goals, ensuring that every Australian life is enriched by gymnastics.

INTRODUCTION

The Gymnastics in Australia National Facilities Guidelines (NFG) are designed to support gymnastics clubs and stakeholders with a planning tool to appropriately scope, design and deliver sustainable, inclusive and successful gymnastics facilities.

The ultimate goal of the NFG is to elevate the delivery and accessibility of gymnastics to participants throughout Australia.

Gymnastics Australia recommends all stakeholders involved in the planning, management and maintenance of gymnastics facilities refer to the NFG when first commencing a facility development project, such as:

- Constructing a new facility.
- Refurbishment of existing facilities.
- Search and evaluation of an existing site/building.
- Conversion of an existing building into a gymnastics facility.

ABOUT THE NFG

The NFG are a national resource to guide the design and development of safe and efficient spaces for gymnastics. This document should not be viewed by any stakeholder as the “essential requirements” for the safe design and operation of a gymnastics facility.

As local regulations, codes and ordinances vary from council to council and state to state, it is impractical for this document to provide the answer to all the questions related to the specific local context of a facility.

Gymnastics facilities that now exist or have been planned or constructed prior to the publication of the NFG are not expected to be altered to meet the currently recommended requirements unless they pose a safety risk to people within the facility. Where it is impractical to meet the guidelines in new or existing facilities, club managers, owners and landowners are strongly encouraged to conduct a risk assessment to minimise and mitigate potential risks and hazards.

It is recommended that all club owners, managers and stakeholders always consult an appropriately qualified professional when making decisions on current or future gymnastics facilities. This may also include referring to their state or territory association for further information and guidance on facility design within their local context.

The guidance and information contained within the NFG are of a general nature and are not provided as a substitute for independent professional advice from a qualified professional. Prior to commencing any facility development project, it is essential that stakeholders conduct their own site-specific research, technical assessment and understand the local interpretation of building regulations.

USING THE GUIDELINES

Stakeholder	How the Guide can be used
Gymnastics Club Owners and Managers	<ul style="list-style-type: none"> • Improve knowledge of facility landscape, design principles and infrastructure considerations • Understand the role of all stakeholders in facility planning and delivery • Plan and budget for local and community facilities based on demand and needs
State and Territory Associations	<ul style="list-style-type: none"> • Communicate facility priorities to local stakeholders • Advise clubs on preferred hierarchy levels and provision • Assist local stakeholders to identify and plan for facilities
Local Government	<ul style="list-style-type: none"> • Inform local strategy, planning and policies • Guide precinct and site master planning • Inform technical design and specification of facilities • Inform budgeting and capital work processes
State and Territory Government	<ul style="list-style-type: none"> • Assist in prioritising projects and funding applications • Identify opportunities for joint sport and community outcomes

- The NFG are provided for gymnastics state and territory associations, affiliated clubs, local councils, state government departments, planners, consultants, equipment and apparatus suppliers, land developers, schools and other peak sporting bodies.
- A core role of the NFG is to educate stakeholders about the specific elements of a gymnastics facility that will be conducive for a safe environment, improve participant experiences, and build the knowledge of stakeholders and their understanding of the technical requirements for gymnastics.

GUIDING PRINCIPLES

Welcoming & Inclusive

Encourage all members of our diverse community to participate in gymnastics.

Dynamic

Inspire our current and future participants, maximising their enjoyment and promoting longevity in the sport.

Functional

Deliver on the core purpose of the facility to the highest achievable standard within available resources, whether this be recreational gymnastics, foundations of gymnastics performance, or preparing athletes for elite competition.

Sustainable

To aim to be economically and environmentally sustainable, to ensure today's facilities are around to develop future generations of gymnasts.

Maximising Participation

Design facilities that are accessible and have the capacity to accommodate more gymnasts and support multiple gym sports, creating opportunities for broader community involvement and fostering growth for gymnasts, coaches, and judges.

Innovative

Embrace new ways to incorporate gymnastics into community facilities, retail environments, and partnerships with complementary service providers.

WHAT IS GYMNASTICS?

Gymnastics provides the foundation for developing a child's **fundamental movement, gross motor skills and physical literacy**. It is an excellent activity for all children to participate in, particularly during their formative years.

Gymnastics is all about teaching children the fundamental movement skills and physical and motor fitness they need to lead an active and healthy life. **Agility, balance, coordination, and strength** are all core benefits derived from learning gymnastics. However, participation has also been shown to develop other skills in children such as **self-confidence, creativity and leadership**.

Participation not only keeps children fit and active, it provides them with control, flexibility and strength which allows them to explore active play through leaping, jumping and movement.

It provides the **basis for future enjoyment and success in all sports** and most importantly leads to a healthy, strong and lifelong connection with physical activity.

“Gymnastics is to sport, what the alphabet is to reading.”



ONE SPORT - MANY DISCIPLINES

Women's Artistic Gymnastics (WAG) – athletes compete on four apparatus: vault, uneven bars, balance beam and floor.



Men's Artistic Gymnastics (MAG) – athletes compete on six apparatus: floor, vault, rings, pommel horse, parallel bars and horizontal bar.



Rhythmic Gymnastics (RG) – athletes perform to music using five types of hand-held apparatus: rope, hoop, ball, clubs and ribbon.



Trampoline Gymnastics (TRP) – athletes perform high-flying acrobatic skills on a trampoline or tumbling track. There are four trampoline gymnastics disciplines: individual trampoline, synchronised trampoline, double mini trampoline and tumbling.



Acrobatic Gymnastics (ACR) – athletes perform acrobatic skills and balances in groups of two, three or four. There are three types of acrobatic gymnastics routines: balance, dynamic and combined.



ONE SPORT - MANY DISCIPLINES

Aerobic Gymnastics (AER) – gymnasts perform continuous complex and high intensity movement patterns to music individually or in groups.



Parkour (PK) - athletes move from one point to another as quickly and efficiently, or creatively, as possible. This includes a range of movements such as running, climbing, swinging, vaulting, jumping, rolling, crawling, and other dynamic actions.



Gymnastics for All (GfA) – an all-encompassing gymnastics discipline which is inclusive of people of all ages, gender and ability. This is often referred to as “recreational gymnastics” where people participate for fun and enjoyment, developing the capabilities for competitive gymnastics or participating for their overall health and wellbeing.



KinderGym (aged 0-5)



Freestyle Gymnastics (FreeG)



TeamGym



Fitter for Life (aged 55+)

BENEFITS OF GYMNASTICS

Regular participation in gymnastics equips children with skills to better handle life's physical and emotional challenges. Recreational gymnastics programs such as KinderGym, General Gymnastics and FreeG provides young children with the opportunity to explore their ability, work within a team, engage with adults, and communicate with their own age groups.

Gymnastics also provides children an opportunity to **develop key social skills** such as listening, following directions, taking turns, being patient and respecting others. It is a great way for children to have fun, meet new friends and learn independence.

Importantly, gymnastics provides **positive movement experiences** which can influence a child's outlook on physical activity for life. Research has shown that an active child often becomes an active adolescent, who in turn becomes an active adult, resulting in happier and healthier communities

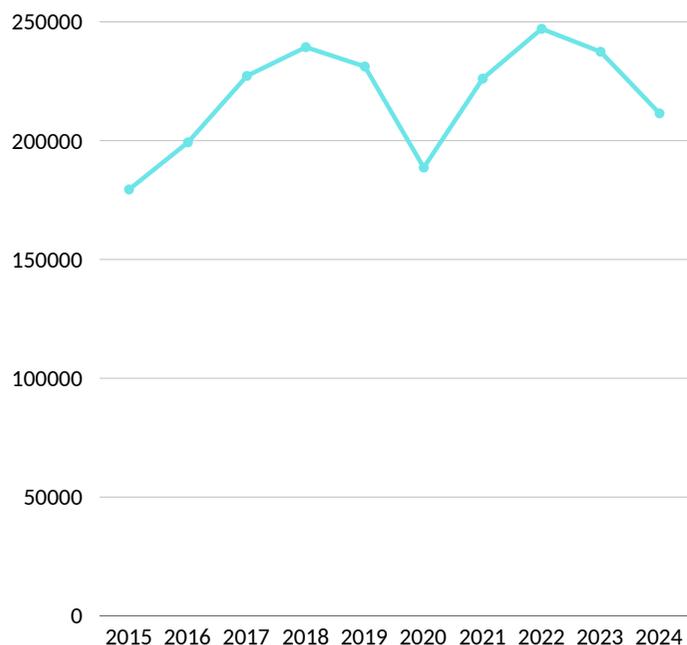
The benefits of participation in gymnastics are not limited to just children. Programs like **Fitter for Life and Masters Gymnastics provide older adults with a fun and social opportunity** that aims to improve mobility, strength and coordination. These programs are tailored to the individual's ability or mobility level and are designed to assist older Australians with everyday activities, such as:

- Walking up and down a flight of stairs.
- Hanging out the washing.
- Bending down or reaching up into cupboards.
- Playing with grandchildren.
- Maintaining physical and motor fitness for life.

Recreational gymnastics programs account for 82% of all gymnastics participants

PARTICIPATION TRENDS

During the last 10 years, gymnastics participation nationally has grown by 18%. Among the registered participants in 2024, 80% were female, 19% were male and 1% were non binary or gender fluid. 93% of participants under the age of 12.



According to research from the Australian Sports Commission (ASC), Gymnastics was the second most popular activity for girls and ninth for boys in 2024, indicating significant engagement among young people. Gymnastics is also the second most participated activity for children under four.

National participation growth has been driven by a significant increase in the number of participants registered under the Gymnastics for All (GfA) category. This category has grown nationally by over 100,000 participants from 95,824 participants in 2016 to 212,079 in 2024 (121% growth).

Nationally, the increase in the number of gymnastics facilities has not kept pace with participation growth. In 2016, there were 706 gymnastics facilities across Australia, equating to an average of 282 participants per venue. As of November 2025, the number of gymnastics facilities has decreased by 1.1% to 698, equating to an average of 302 participants per venue.

While this high-level analysis does not take into consideration the type and size of the gymnastics facilities being built, it does indicate that on average, facilities are becoming busier and the demand for space is increasing. Notably, in 2024, ten clubs were home to more than 2,000 athletes, highlighting the need for some clubs to expand into larger or additional facilities.

In terms of coaching, the average age of gymnastics coaches is 20, with 89% working part-time, emphasising the importance of youth employment opportunities within the sport.

These trends highlight the need for ongoing consideration and investment into gymnastics facilities. This will ensure the sport can keep up with the growing demand and deliver the key fundamental movement and physical literacy development programs needed by Australian children.

NATIONAL FACILITY HIERARCHY

The National Facility Hierarchy defines the key purpose, core activities and amenity provision for all levels of gymnastics facilities. The objective of the hierarchy is to assist key stakeholders by guiding investment, planning and development priorities for the provision of gymnastics facilities.

It is important to note that the **facility hierarchy is not a ranking of each facility** but provides a framework to assist clubs and stakeholders to:

- Identify future facility provision opportunities
- Identify planning and development priorities
- Ensure an optimal mix of facilities across the state
- Ensure there is equitable access to participation opportunities and the performance pathway

The provision of facilities at each level of the hierarchy will be determined by a range of factors including the local context, current and future supply and demand, government advocacy, and the potential for commercial and other partnership opportunities.

A major consideration at all hierarchy levels is the capacity for venues to host competitions and events. While it's ideal to have venues available for competition setup as needed, for long-term participation, engagement, and growth, it is essential to have facilities that are permanently set up with the capability to host events. This is particularly important at the regional and community levels.

NATIONAL



STATE



REGIONAL



COMMUNITY



LOCAL



Having higher ceilings and greater activity space at all hierarchy levels improves the flexibility and long-term sustainability of the facility, ensuring it can support a variety of activities, multiple gymsports and competitions. It is also important to recognise that each gymsport has specific requirements for apparatus setup and the dimensions of the performance area, which must be considered to ensure the facility can accommodate these needs effectively.

The hierarchy's levels do not limit clubs or facilities from delivering programs at a higher level, provided there is sufficient space and resources to support these programs, while maintaining the delivery of the core activities.

Ultimately, the goal of this facility hierarchy is to assist stakeholders to identify key opportunities to deliver a 'hub and spoke' facility model. This model creates a network of facilities which provides equitable access to pathway and participation opportunities – across regions and suburbs.



NATIONAL

The core purpose of a National level facility is to provide an elite high-performance training environment for gymnasts preparing for the Olympic Games and Commonwealth Games.

A large activity area is beneficial to provide separate areas, allowing athletes of differing abilities and from different gymsports to train concurrently without the need to share, adjust or modify apparatus.

Due to the high volume of training hours performed by athletes at this level, facilities also should include amenities to support other areas of the daily training environment (DTE). This includes sports medicine/science, strength and conditioning, study, relaxation, and meal preparation.

As an additional benefit to the broader gymnastics community, the facility should also have the capability to support the development of grassroots gymnastics programs through the delivery of coach development and education programs.

	Total Facility Footprint	Total Activity Area		Ceiling Height		Foam Pit	Competition
Essential	2,800m ²	2,400m ² (60m x 40m)	Dependent on user numbers and apparatus provision and layout.	6-10 metres	10m is essential if trampoline gymnastics is included. 12m is optimal.	Essential – Large foam pit(s) with multiple apparatus. Provision of closed pit system on some apparatus.	Competition delivery is an optional requirement of this level.
Desirable	> 4,000m ²	3,600m ² (60m x 60m)	Determined during the feasibility and business case processes.	10-12 metres			

STATE

The core purpose of a State level facility is to provide the primary training facility for high-performance athletes aspiring for national selection.

The activity area within these facilities will generally be optimised for a high-performance training environment, including multiple sets of apparatus and specialist training areas such as open and closed foam pits.

Similar to a National level facility, the high volume of training hours performed by athletes at this level requires facilities to include amenities to support other areas of the daily training environment (DTE). This could include sports medicine/science, strength and conditioning, study, relaxation, and meal preparation amenities.

In some states it may be desirable for the State level facility to have the capability to host large gymnastics competitions. For this to be included in the overall provision on the site, additional activity area space may be provided to minimise the impact of competitions on the HP training environment.

	Total Facility Footprint	Total Activity Area		Ceiling Height		Foam Pit	Competition
Essential	2,400m ²	2,000m ² (50m x 40m)	Dependent on user numbers and apparatus provision and layout.	6-8 metres	10m is ideal if trampoline gymnastics is included, but not required.	Essential – Large foam pit(s) with multiple apparatus. Provision of closed pit system on some apparatus.	Competition delivery is an optional requirement of this level.
Desirable	4,000m ²	3,600m ² (60m x 60m)	Determined during the feasibility and business case processes.	8-10 metres			

REGIONAL

Regional level facilities are primarily designed to provide a training environment for competitive athletes on the performance pathway.

The activity area within these facilities will provide opportunities for athletes of differing abilities and gym sports. As a result, the activity area should be flexible and the equipment and apparatus provided should allow a full complement of programs, from recreational gymnastics through to the performance pathway, to be delivered. The activity area should include multiple sets of apparatus and may include specialist training areas such as open and closed foam pits.

These facilities may have the capability to host small to medium-sized regional and intra-club competitions. In smaller states, a Regional level facility may be capable of hosting larger competitions such as State Championships. To facilitate competition, Regional gymnastics facilities also need to be able to provide adequate spectator viewing areas and other amenities to support increased visitation during events.

	Total Facility Footprint	Total Activity Area		Ceiling Height		Foam Pit	Competition
Essential	1,500m ²	1,200m ² (35m x 35m)	Dependent on user numbers and apparatus provision and layout. Determined during the feasibility and business case processes.	6-8 metres	10m is ideal if trampoline gymnastics is included, but not required.	Desirable – Large foam pit with multiple apparatus.	Competition delivery is an optional requirement of this level.
Desirable	2,000m ²	1,600m ² (40m x 40m)		8-10 metres			

COMMUNITY

A Community level facility is where the foundations of gymnastics performance are developed, and gymnasts are introduced to the performance pathway.

This is the primary contact point for participants who want to participate in non-competitive and competitive gymnastics. Community level facilities deliver a combination of recreational and competitive gymnastics programs.

Generally, these facilities are set up to maximise the utilisation of the activity area for the delivery of gymnastics programs. Considerations given for the utilisation of facility to host local and community competitions and events.

These facilities are specialised for gymnastics with gymnastics equipment and apparatus permanently set up.

	Total Facility Footprint	Total Activity Area		Ceiling Height		Foam Pit	Competition
Essential	1,100m ²	700m ² (20m x 35m)	Dependent on user numbers and apparatus provision and layout.	5-8 metres	10m is ideal if trampoline gymnastics is included, but not required.	Optional – consideration for in ground, covered foam pit or above-ground foam pit if possible.	Competition delivery is an optional requirement of this level.
Desirable	1,500m ²	1,000m ² (30m x 35m)	Determined during the feasibility and business case processes.	8-10 metres			

LOCAL

The core purpose of clubs in Local level facilities is to increase the accessibility and visibility of gymnastics in a local area through the delivery of recreational and competitive gymnastics programs to the community

Local level facilities may support larger community or regional level facilities to service the local population.

These facilities can be small, flexible spaces which may include non- traditional spaces, e.g. retail buildings in high traffic areas. These may also be located in community spaces such as halls, schools, commercial properties and recreation centres. These facilities will also act as satellite or secondary facilities for clubs with an established Community or Regional level facility to expand their reach to the community. In some circumstances, such as small regional communities, a Local facility may be shared with other user groups.

Where practical, gymnastics equipment should be permanently set up to reduce; manual handling risk/injury, labour costs associated with set up/pack up and equipment damage/deterioration.

	Total Facility Footprint	Total Activity Area		Ceiling Height		Foam Pit	Competition
Essential	Flexible to accommodate safe delivery	Flexible to accommodate safe delivery	Subject to supporting amenities being provided. Determined during the feasibility and business case processes.	2.8 metres	5m is essential if lower level trampoline gymnastics is included.	Not required	Competition delivery is an optional requirement of this level.
Desirable	< 275m ²	< 200m ² (14m x 14m)		5 metres			

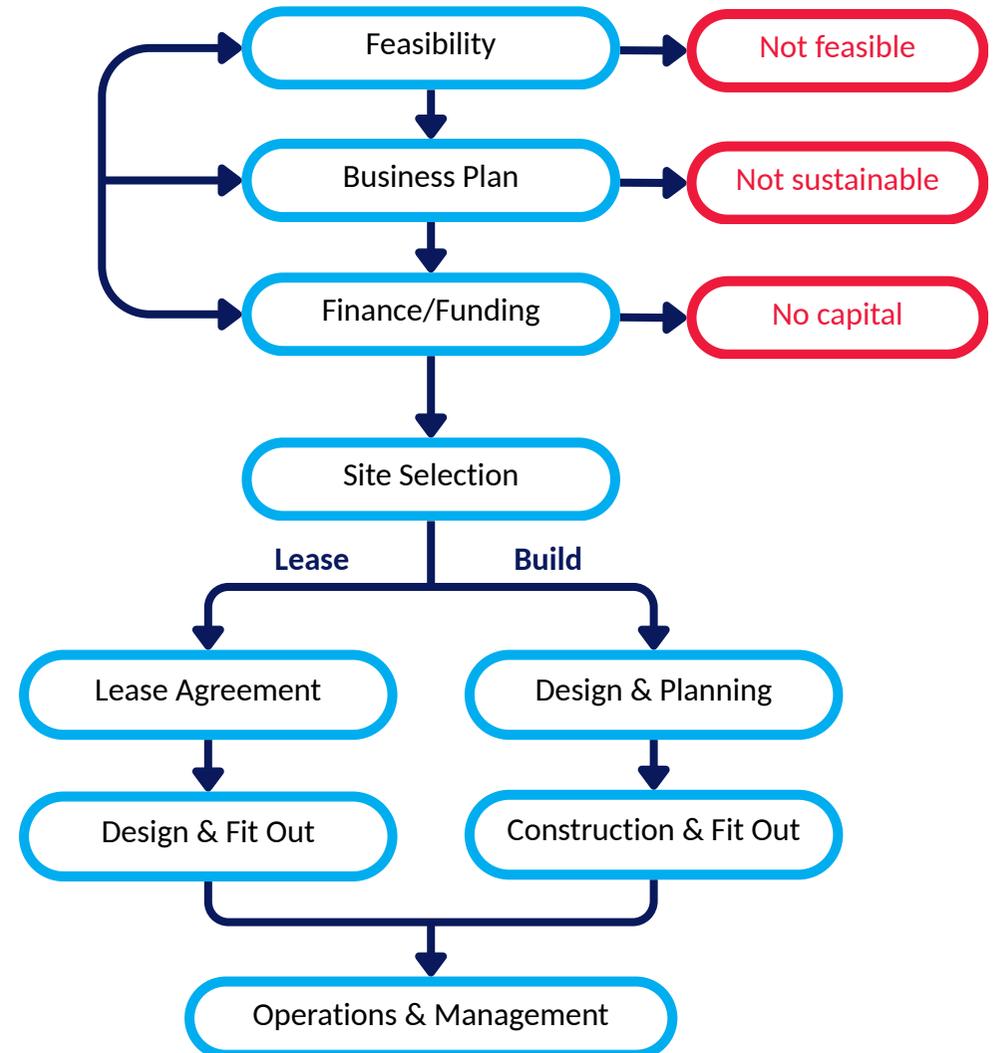
FACILITY PLANNING PROCESS

The following pages provide a high-level overview of the sequential process undertaken in either leasing or building a gymnastics facility, from project inception to the continued operation once the facility is functional.

Expectations of modern gymnasts have evolved over time which has driven change to the operational needs and provision levels of gymnastics facilities. These internal and external pressures are driving gymnastics clubs to build, redevelop or lease new facilities. A thorough and structured planning process will ensure facilities are sustainable and financially viable to meet the evolving operational requirements of gymnastics and create an accessible and welcoming community asset.

The process flow diagram to the right outlines key stages which should be addressed in the initial concept stages. If any of these three stages do not meet the requirements of all parties and stakeholders, the project is highly unlikely to succeed and may stall before its completion.

From a financial, legal, and resourcing perspective, different steps occur following site selection depending if a facility is being either leased or constructed, but these two stages occur in parallel within the planning process.



FACILITY PLANNING PROCESS

1 – Preliminary Feasibility	2 – Business Plan	3 – Finance/Funding	4 – Final Site Selection
<p>The initial stage involves assessing the viability of the project from its onset. The needs, aspirations and overall objectives of the club should be considered, and if achieving these objectives is financially viable. The larger the project – the greater depth this initial analysis will require.</p>	<p>This stage involves converting the conceptual project into a physical plan which addresses in depth the project deliverables. All parties involved in the project should be introduced at this stage to avoid any misalignment in the direction of the project. A business plan may be adjusted as the planning process progresses, so any changes are communicated to all parties involved.</p>	<p>It is critical to the project to have a final cost figure to deliver the project and an understanding of how this will be funded. To avoid any unexpected financial incurrences, a robust project budget with detailed cost estimates is essential. All funding sources should be carefully considered, as funding opportunities and requirements can change regularly.</p>	<p>Maintaining the project’s needs and not rushing the selection is vital to the success of the venue. Developing an understanding of the local landscape should come first, followed by an independent site appraisal. The facility should only be selected if it aligns with the club projections and is financially viable.</p>
5 – Design & Planning	6 – Leasing Agreement or Design/Planning	7 – Design or Construction & Fit Out	8 – Operation & Management
<p>Quite often this stage can see the most setbacks to the project timeline, which need to be considered as early as possible. This will often be the first involvement in the project for planning officers, builders and contractors, so it’s important that they have a thorough understanding of the intended project outcomes.</p>	<p>This stage can be critical to the early success of a facility, as its design gives a public face to the organisation. The planning costs associated can be vastly different depending on the location (lease or purchase of property) and scale of the facility, but generally includes planning permissions, legal fees and commissioning an interior architect and/or designer.</p>	<p>Before a facility becomes operational, several setup costs must first be considered. These generally include construction costs (including labour and materials) and equipment purchase. The costs of preparing a building to be suitable for gymnastics activity can vary hugely depending on the state of the building to be used.</p>	<p>Once the facility has been successfully opened, the priority becomes efficient and sustainable maintenance. Several considerations should be made prior to the physical opening of the club (such as monthly cash flow predictions based on operational costs such as utilities, rates, etc.), which can help anticipate any unexpected future costs.</p>



FACILITY PLANNING GUIDANCE

FACILITY PLANNING GUIDANCE

Building Regulations, Standards and Codes

There are many standards, acts, codes and regulations that are relevant to the planning, design and construction of gymnastics facilities, all of which must be complied with.

It is essential each of these are fully considered and complied with during the planning and design process. Therefore, engaging an architect or building designer early in the planning process can avoid significant delays and variations later in the project.

The list below highlights some of the key information which needs to be considered when designing a gymnastics facility:

- Australian Standards (using the version applicable)
- The Building Code of Australia: National Construction Code (NCC)
- The Human Rights and Equal Opportunity Commission (HREOC) advisory notes
- The National Code of Practice for the Construction Industry and the Australian Government
- Implementation Guidelines for the Code
- The Environment Protection and Biodiversity Conservation Act (1999) and the requirements of state and territory departments and authorities responsible for planning and environmental matters
- The National Standard For Construction Work document, National Occupational Health and Safety Commission – NOHSC:1016
- The Protective Security Policy Framework (PSPF) document promulgated by the Australian Government Security Construction and Equipment Committee (SCEC)
- Work Health and Safety Acts (2011) (WHS)
- Child Safe Standards (as relevant in each state and territory)

Note: This is not an exhaustive list. Please ensure you seek your own independent advice from a qualified professional.

FACILITY PLANNING GUIDANCE

Accessibility

Gymnastics in Australia supports and encourages people from all backgrounds to participate in every form of the sport and encourages all facilities to be designed and set up to ensure their spaces are inclusive and safe for all who participate. An accessible and inclusive facility design that meets the needs of all participants can promote greater benefits to communities. This will foster participation growth through the delivery of programs that provide opportunities for all community members to engage in gymnastics activities.

It is crucial to design gymnastics facilities with floors that are level, flat, and even throughout. This ensures safety for gymnasts and promotes inclusivity for older individuals and those using mobility devices. Planning for this accessibility from the early stages of facility design is essential to avoid costly additions or modifications later, which could introduce hazards or reduce valuable space.

Additionally, considerations for accessibility should extend throughout the entire facility, ensuring that all areas are easily accessible. This includes the use of ramps, wide doorways, and minimal stairs to eliminate barriers to entry. Ensuring easy access to all parts of the facility from the start enhances overall usability and safety.



FACILITY PLANNING GUIDANCE

Accessibility Continued.

Users who may benefit from accessible venues include (but are not limited to):

- People with temporary impairments or injury
- Ageing populations
- Parents and carers with prams, pushchairs and wheelchairs
- People using mobility aids
- Trans and gender diverse people
- People for whom English is a second language or do not speak English

To achieve accessible facilities and amenities, both standards (measurable) and universal design (principles) should be included into planning from all stages of the delivery and operation process.

All designs for new and refurbished facilities must fully comply with the Disability Discrimination Act (DDA) and relevant Australian Standards, which include (but are not limited to) the following:

- Disability Discrimination Act (1992)
- Disability (Access to Premises – Buildings) Standards 2010
- Australian Standard 1428.1 – Parts 1, 2, & 4 - Design for access and mobility.



FACILITY PLANNING GUIDANCE

Universal Design Principles

Gymnastics facilities at all levels share a commonality; irrespective of age, gender, ability and/or cultural background, people who come from all walks of life can participate and be involved.

As a community, it is encouraged that all facilities be designed not only to promote participation in the sport but also to provide flexibility in their use to cater for other community usages.

Through the adoption of best practice design philosophies such as universal design principles, gymnastics facilities can promote and facilitate inclusion for not only sporting-related users but other community groups who may use gymnastics facilities as places to meet, interact and conduct events. By incorporating universal design principles into future gymnastics facilities, it maximises the usability and viability of every new venue.

The seven universal design principles include:

1. Equitable use
2. Flexibility in use
3. Simple and intuitive use
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space for approach and use

Additional Universal Design Information Sources

Universal Design should be applied to gymnastics facility planning to ensure the best outcomes for the community. The following sources provide further information:

- Sport and Recreation Victoria (2017) Universal Design Principles
- Centre for Universal Design Australia (2017) Universal Design Australia
- Australian Disability Clearinghouse (2017) Australian Disability Clearinghouse
- International Paralympic Committee - Accessibility Guidelines for Olympic and Paralympic Games.

FACILITY PLANNING GUIDANCE

Occupational Health & Safety and Safe Design

Under the Work Health Safety Act 2011 (Cmlth) (the WHS Act), the primary duty of a person conducting a business is to ensure that, so far as is reasonably practicable, workers and other persons are not exposed to health and safety risks arising from the conduct of the business.

Gymnastics club owners, managers, board and committee members need to be aware of their duty under the WHS Act to ensure all coaches, staff, participants and spectators are provided with a safe environment. Eliminating hazards at the design or planning stage is often easier and cheaper than making changes later when potential hazards become real risks. As such, persons undertaking the design of a facility (including architects, building designers, engineers, surveyors and interior designers) must ensure, so far as is reasonably practicable, that the facility minimises risks to health and safety.

An important aspect of any facility design is ensuring effective emergency evacuation planning. This is critical for the safety of not just staff and participants, but also spectators and anyone else within the facility. It is important that all exit doors and evacuation routes are clearly marked, unobstructed, and easily accessible. The layout should allow for a fast and efficient exit in the event of an emergency.

In addition to providing a safe workplace for employees and other persons, the safe design of a facility can result in hidden benefits, such as:

- More effective prevention of injury and illness
- Improved utilisation of the facility and its amenities
- Improved efficiencies and reduced running costs
- Forecasting lifetime facility operational and maintenance costs
- Innovation and new thinking around hazard prevention

The duty to create safe designs also extends to the design or redesign of any part of a facility and includes additions or modifications. This requirement also includes the layout of apparatus within the activity area. Altering the position and layout of apparatus should be done with caution and with appropriate planning risk assessment processes in place.

FACILITY PLANNING GUIDANCE

Manual Handling

In many clubs, gymnastics coaches are required to move gymnastics equipment, including apparatus and matting. This is more prevalent in “set-up/pack-down” facilities which require the apparatus and matting to be moved every time the facility is used by the gymnastics club.

Even in club environments where apparatus are permanently set up, many coaches are still required to move some apparatus and mats to suit modified lesson plans and functionality of the activity area.

The risk of manual task injuries amongst gymnastics coaches and other club staff must be controlled, and facility design can play an important role in minimising some of the risks of manual task injuries. Examples of this may include:

- Providing adequate storage space close to the activity area for the set-up/pack down facilities
- Minimising the requirement to pack away apparatus through efficient programming or facility design
- Understanding the capacity and limitations of a facilities footprint to deliver certain programs



FACILITY PLANNING GUIDANCE

Crime Prevention through Environmental Design

The fundamental principle behind CPTED is to use knowledge and creativity to design built environments in ways that lessen or prevent the incidence of crime within surrounding environments. The principles of CPTED are equally applied to the interior design and layout of a gymnastics facility as adapted to the exterior and surrounding areas.

New facilities should consider the safety at all times of all users. This may include but is not limited to:

- Sight lines for staff and participants
- Comprehensive CCTV with secured on-site/remote recording
- Vegetation, both now and after the growth phase
- Areas of isolation without easy visibility
- Whole property security – gates, fencing etc.
- Monitored alarm systems
- Evacuation and lock-down areas
- Access to communications
- Education/orientation/observation of all participants.

FACILITY PLANNING GUIDANCE

Child Safety

Creating safe environments for children and young people to fully and actively participate in gymnastics should be the goal of any gymnastics facility design.

The design should assist and facilitate gymnastics' club coaches and staff to ensure all children using the facility are protected to the best of their ability and aligns with their duty of care and compulsory legislative standards.

To achieve this, designers must create environments that promote inclusiveness, participation and child empowerment, and mitigation of risks to safety, especially through poor or inadequate lines of sight between key facility components.

Access to areas such as changeroom and bathroom areas, as well as other private and semi-private areas like offices, storage areas and meeting rooms, should be able to be observed and monitored by staff on the gym floor. With the exception of bathrooms and changerooms, all rooms and spaces in the facility should have windows or clear glass panels in the doors to eliminate complete privacy.

Additionally, there are many other areas of concern when designing a facility to be used primarily by children; they include the changeroom, showers, bathrooms, and kitchen/kiosk areas, which all require special consideration due to the mixture of water, electricity and other hazards which can result in injury if hidden from supervision.



FACILITY PLANNING GUIDANCE

Environmentally Sustainable Design

Facilities must be designed and built to withstand varied environmental conditions, especially considering Australia's vulnerability to climate change. This is particularly important for gymnastics as it is a year-round sport. One major issue is managing heating and cooling, which are significant energy consumers in sports facilities, and without efficient temperature control, enrolments can drop during the colder winter or hotter summer months. To address this, incorporating energy-efficient systems can reduce environmental impact while maintaining a comfortable environment for gymnasts throughout the year.

When building new or redeveloping existing facilities, it is important to reduce direct environmental impacts through the implementation of environmentally sustainable practices and design ethos such as:

- Optimising the size of new buildings and/or the potential of existing structures.
- Investing in energy efficient technologies and optimising energy usage through initiatives such as passive solar design and natural ventilation systems.
- Using environmentally friendly and green materials.
- Enhancing indoor environmental quality.
- Optimising operational and maintenance practices.
- Investing in water saving measures.
- Minimising waste through recycling and efficient use of resources.
- Ensuring the facility is designed, occupied and operated with the objective of best practice environmental performance
- Utilising natural sources for heating and ventilation.
- Maximising the use of natural light.

By prioritising these sustainable practices, gymnastics facilities can contribute to a healthier environment, reduce their operational costs, and enhance the overall user experience.

FACILITY PLANNING GUIDANCE

Entrance and Circulation Space

Gymnastic facilities should provide safe, equitable and dignified access for all participants, staff, spectators and the broader community. All design must comply with all applicable accessibility and amenity requirements stipulated in the National Construction Code (NCC).

The main entrance of a gymnastics facility should be designed with the following principles in mind:

- Be prominent, clearly visible, well-orientated, well-sized, clearly signed, intuitive and easy to find for pedestrians entering the facilities
- Be easily accessible from the carparking area, ideally providing a safe pick-up and drop-off process for parents/adults
- Include protection from the weather at the main entrance

Upon entering a facility, there should be adequate circulation space to cater for peak operation periods. For most facilities, this will occur during the crossover between classes where large numbers of participants are being picked-up or dropped-off by their parents. Circulation space should provide capability of patron movement, orientation and way-finding for participants, staff and visitors—including those with mobility issues or disabilities in all newly built facilities. The design should ensure that those accessing the facility can move around the facility with minimised congestion. Additionally, if a facility is designed to accommodate the delivery of events, the design of the facility should provide sufficient space to allow for ease of movement between the entrance and the spectator viewing areas.

To ensure the safety and protection of gymnasts, there should be clear separation between the gymnastics floor/activity area and the entrance/waiting/spectator areas.

FACILITY PLANNING GUIDANCE

Logistics and Loading Zones

The design of the facility should include adequate provisions for logistics and loading zones to ensure the smooth handling of equipment and supplies.

The loading zone should be equipped with a durable, sealed surface that can withstand the weight of heavy equipment. Adequate lighting is essential to guarantee safe operation at all hours. Large, accessible roller doors, and clear access paths should be incorporated, along with provisions for accommodating large vehicles, to facilitate the easy movement of equipment in and out of the facility.

To ensure safety, loading zones should be separate from areas used by children and these zones should be secured to prevent access especially during peak times. Additionally, there should be designated space for containers and storage, allowing for temporary storage of large items or equipment before and after events.



FACILITY PLANNING GUIDANCE

Acoustics Design

Well-designed acoustics can enhance the environmental quality by facilitating communication, improving wellbeing, and/or aiding in noise control. It is essential for creating spaces that promote a good learning and teaching environment for gymnastics.

The design of gymnastics facilities should provide an acoustic environment in which clear communication between coach and gymnast can be achieved, while disturbance from other activities or gymnasts is minimised.

Factors affecting acoustic performance and internal noise levels which require appropriate acoustic treatment include:

- Facility location in relation to noise sources, such as roads and industry surrounds
- Relationship between varying noise levels anticipated in different parts of a building (e.g. netball/basketball courts)
- Activity and equipment noise within spaces (such as music, playground activities in covered areas and machinery noise)
- In multi-level buildings, impact and vibration noise from foot traffic and machinery from rooms above and below
- Impact noise from rain and hail on roof sheeting
- Impact noise, vibration and resonances in light metal framed structures from foot traffic
- Sound travel paths through openings, joints or gaps between walls, floors, ceilings and openable joints in operable walls, doors and view panels
- Sound travel between rooms over the partitions via the ceiling space, where partitions do not extend to the full height
- Noise reflection and reverberation within integral spaces larger than 100m² and in large, covered areas
- Noise from mechanical ventilation and air-conditioning fans and compressors

Floor planning should consider acoustic performance and whether the spaces are fit-for-purpose. Spaces with incompatible acoustic requirements should be located as far apart as practical or consider using physical barriers/dividers between activity spaces to reduce noise

FACILITY PLANNING GUIDANCE

Acoustics Design Continued.

Guidance Note: All acoustically engineered solutions must comply with and be installed in accordance with the following Australian standards:	
AS/NZS 2107 Acoustics	Recommended design levels and reverberation times for building interiors
AS/NZS ISO 717.1 Acoustics	Rating of sound insulation in buildings and of building element - Airborne sound insulation
AS ISO 2631.2 Mechanical vibration and shock	Evaluation of human exposure to whole body vibration - vibration in buildings (1Hz to 80Hz)

FACILITY PLANNING GUIDANCE

Car Parking and Traffic

Safe access for the public to access the facility via road is an important safety consideration for the design of any facility. At the same time, it is also essential to ensure pedestrian safety on the site.

The design and layout of car parking areas needs to ensure the safety of all visitors to the site, whether it is a stand-alone facility or part of a mixed use residential, commercial or industrial development.

On and off-site conflicts with children, visitors and other users of the facility can be avoided through a combination of design and management plans. For example, drop-off and parking areas in light industrial or commercial areas need to be carefully sited, away from heavy truck traffic and main roads to minimise the risk of accidents.

While the provision of car parks is generally determined by the local council or planning authority, there are no consistent regulations or standards that apply to gymnastics facilities. In some circumstances, the expectations of the local council for the provision of car parking do not reflect the actual needs of gymnastics clubs, which generally have a high proportion of school aged staff, below the legal driving age.

In some Local Government Areas (LGAs), the occupancy limits of a building are linked to the provision of carparking, which can severely limit the capacity of a facility. This is despite the vast majority of participants who use gymnastics facilities being children.

Guidance Note:

The following is provided as a guide for gymnastics facilities, where possible, provide the following:

- A pick-up/drop-off area with safe access to the front entrance of the facility (visual line of sight from the drop off area to the entrance)
- A minimum of one accessible parking space to be provided.

The above provision is expected to only apply to new sites and not retrospectively to existing sites or developments where site area constraints exist.

FACILITY PLANNING GUIDANCE

First Aid/Injury Treatment Rooms

From time to time, athletes may sustain an injury and require treatment that may involve anything from applying a band-aid to needing specialised medical equipment. While not all injuries or treatments require the use of a first-aid room, in some cases it may be preferred to protect the dignity and privacy of the gymnasts or staff.

Clubs should always consider and abide by their child safety policies and procedures and the GA Child Safe Policy when treating athletes.

The room should have all the materials necessary for handling an emergency from equipment to emergency telephone numbers, medicine, towels, strapping tape, elastic wraps and other medical treatment materials.

The room should also include:

- Storage for first-aid supplies
- Bed or stretcher
- Freezer (for ice)
- Hand basin

Consideration should also be given to emergency service access (including stretcher access and turning) and enabling a visual link to the activity area and reception area, while keeping in mind the privacy of the individual.

The first-aid room should be close to the general office, for the purpose of control and supervision.

FACILITY PLANNING GUIDANCE

Lighting

A well-designed lighting system can enhance all visual tasks, improving athlete performance and reducing the potential for injuries.

In the last decade, LED light sources have become the preferred means of providing illumination over traditional fixture types such as a metal halide. While LED lighting systems can have higher initial capital costs, they are generally cheaper to run and maintain, resulting in cost savings over the life of the system.

When designing and selecting a lighting system, the critical elements which need to be carefully considered upfront are; illuminance level, light consistency across the activity area, glare, and the costs of installation, operation and maintenance, including the methodology of replacing light bulbs. Ease of access for changing high light bulbs is particularly important, as it can be challenging to do so without dismantling equipment if placed directly under a light.



FACILITY PLANNING GUIDANCE

Illuminance

The illuminance or lux level of a light system can be increased in two ways; using a lamp with a more powerful output or increasing the number of lamps used.

It should be noted that increases in lux levels will result in an increase in both the capital and running costs of the system. In many cases there is no need to exceed the recommended standard. It is also important to periodically test the lux levels to ensure the light system is maintaining the required output averages.

The testing of lux levels across an activity area can be determined using a calibrated light meter. Lux level readings are taken across a uniform grid which covers the Total Activity Area. The lux values are then averaged to determine the average lux level and the uniformity of light across the Total Activity Area.

The colour of gymnastics mats and flooring can also have an impact on illuminance levels. Dark colours (which are traditionally used by some manufacturers) will absorb some of the light-emitting from the light system. It is important the lux levels are measured after all the matting and apparatus is installed to understand the true lux level within the activity area.

Guidance Note:

The minimum lighting standard for gymnastics facilities are based on the Australian Standard for multi-purpose indoor sports centres:

These are:

- 300 lux for recreational gymnastics and competitive training
- 500 lux for gymnastics competitions (regional and state level)
- 1500 lux for national and international competition (event venues)

FACILITY PLANNING GUIDANCE

Uniformity

Consistency of light is measured as 'uniformity'. This is also reported in the Australian Standard and clubs should specify lighting within their facility to meet the appropriate Standard for their respective site use. The measure of uniformity describes mathematically how evenly light projects across the activity area. Where uniformity is poor, the eye struggles to adjust and may result in participants misjudging distances to the floor or apparatus.

Uniformity is improved by installing more light fittings or using light fittings with reflectors designed to provide more even light coverage. The placement of the light fittings relevant to the activity area is important to maximise uniformity and this placement is determined by the optical design. Placement includes positioning relative to the activity area as well as mounting height.

Light Loss Factors

Light loss occurs due to two main factors:

- Lumen depreciation – decreasing output as the light fitting ages.
- Dirt depreciation – decreasing output of the fitting due to airborne dust and other environmental factors.

While all light fittings suffer from some level of light loss, lumen depreciation is particularly important to consider with metal halide light fittings. For this reason, it is important to ensure the expected lighting levels at the end of the planned maintenance period remains greater than the desired minimum lux levels. Light loss factor can be greater if the interval between the regular cleaning and maintenance of the light fittings is prolonged. Consideration needs to be given to the anticipated frequency of cleaning and maintenance when designing and budgeting for the lighting system.

FACILITY PLANNING GUIDANCE

Glare

Glare can occur from sources such as sunlight, car headlights and the placement of the lamp in the gymnasts' line of sight (when they are using an apparatus). Considerations should be made for natural light from windows/open doors (size, orientation, shading and internal coverings), and facility equipment placement when formulating the venue lighting plan.

Emergency Lighting

Emergency lighting is activated automatically when a building experiences a power failure. Emergency lights perform two critical roles in an emergency; they provide essential lighting to help facility users safely navigate their surrounds and they also visually indicate the fastest and safest route for occupants to exit the building. All emergency lighting must comply with and be installed in accordance with the relevant Australian standards.

Security Lighting

Security lighting should be provided to both internal and external areas. Internal security lighting should also be located at building entries, at changes of direction to external pathways and for stairs and corridors. External security lighting should be located at car parks, pathways and the perimeter of buildings.

Designers must consider the needs and uses of the site, including evening training sessions, competitions, and use by other community groups after hours. The potential for vandalism should also be minimised.

All security lighting must comply with and be installed in accordance with the relevant Australian standards.



ACTIVITY AREA GUIDANCE

ACTIVITY AREA GUIDANCE

Introduction

The gymnastics activity area is defined as any part of a facility where participants interact with gymnastics apparatus or engage in gymnastics or related activities, such as dance or cheer.

It is the most critical part of a facility to get right, from a design and functionality perspective, to ensure the facility is safe for participants and staff and financially sustainable for the club occupying and operating it.

One of the biggest challenges facing many gymnastics club owners and managers is the lack of defined industry standards to guide the design, layout and setup of gymnastics apparatus and equipment. Each gymnastics facility is unique, from the number of members through to the shape and size of the activity area. As a consequence, it is imperative that all gymnastics club owners and managers seek the advice and guidance of an appropriately qualified professional when either setting up or modifying the layout of the facility's activity area.

While the following pages cover some of the key considerations and common mistakes which are made in the set-up of the activity area, it is not a comprehensive resource of all things that need to be considered when designing the activity area. It is recommended that all gymnastics club owners and managers engage an experienced and appropriately qualified professional to assist in the design the apparatus layout for the unique requirements of each facility.

This section is also not intended to impose any additional or onerous expectations for club owners or managers to implement. It simply highlights a best practice expectation to inform and protect club owners and managers from legal or financial issues which could have a significant and detrimental impact on the club.

Please note: The advice contained within this section is general in nature. Please ensure you seek your own independent advice from an appropriately qualified professional before commencing any works at your facility.

ACTIVITY AREA GUIDANCE

Common Issues and Oversight

Throughout the extensive consultation with club owners, managers, and industry stakeholders, a number of common issues and oversights were identified. The top issues and oversights are detailed below to assist stakeholders who are about to embark on the design or lease of a new facility.

Not Seeking or Asking for Advice

There is a wealth of knowledge within the gymnastics industry that is largely untapped. From other club owners to equipment suppliers and key industry stakeholders, these people have many years of experience setting up and operating gymnastics facilities.

In most cases, these stakeholders are more than happy to provide advice and guidance to new club owners and managers through the decision-making process before they commit to leases, layouts or apparatus purchases.

Relying on Commercially Designed Options

While equipment supplier's designs can be considered, such designs may not be in the best interest of effective venue capacity. First, set your activity areas and desired capacity, then have your equipment design and layout meet those criteria.

Selecting Cheaper Options

It is essential that club owners and managers seek advice from an appropriately qualified professional to design a solution and ensure appropriate expenditure on the correct component, fixing, or apparatus.

There are times for selecting the cheaper option, but selection of components relating to the safety of athletes and staff is not one of these.

ACTIVITY AREA GUIDANCE

Common Issues and Oversight Continued.

Preliminary Investigation and Design

Many existing club owners and managers have examples of how their club has been limited in capacity due to an issue or factor they were not aware of (e.g. carparking restrictions, building occupancy limits, etc.). These issues occurred mainly due to insufficient preliminary investigation, pre-planning and understanding of local government rules and regulations to ensure the proposed facility was compliant and permissible in the area.

Additionally, some stakeholders during consultation expressed that they did not conduct enough detailed planning on the facility layout prior to the installation of equipment. This led to conflicts and issues arising in the operation of the facility, which limited the efficiency of the activity area.

Failing to Plan for Growth

Many club owners and managers reported outgrowing their facility earlier than expected. While this may seem like a positive, there are significant costs associated with the establishment and then exiting a facility. These include exit fees and make-good clauses within lease agreements as well as the capital investment into additional apparatus. This has prevented many clubs from taking full advantage of the true market potential in their local area.

To avoid this, clubs should have a long-term business plan that clearly identifies the club's short, medium, and long-term objectives (including the potential for growth) before looking for a facility. This may also include short-term opportunities to sub-lease excess space to complementary organisations (e.g. martial arts) in the first few years of operation to cover the expense of additional space to grow.

ACTIVITY AREA GUIDANCE

Notice and Acceptance of Risk

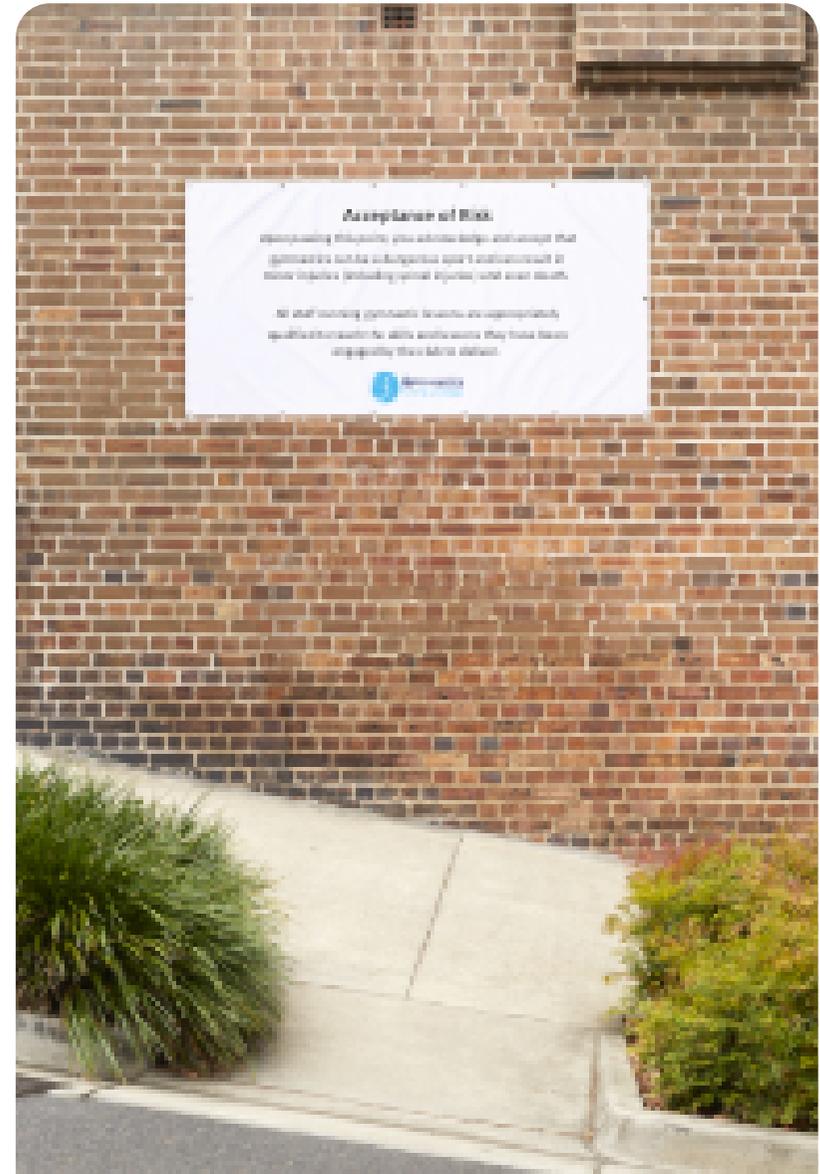
The first line of defence for potential legal issues for a club is to ensure participants (and their legal guardians) are aware of the risks associated with participation in gymnastics. While it may seem daunting for parents of kinder or recreational gymnastics participants to acknowledge and accept the risks associated with the sport, it is critical they are made aware of these prior to commencing any gymnastics program.

It is recommended that gymnastics clubs display a notice at their main entrance that is visible to everyone entering the facility. This should also be reflected on all registration and membership forms. An example of this notice is provided below, however, clubs should seek their own independent legal advice.

Example 'Acceptance of Risk' Notice:

Upon passing this point you acknowledge and accept that gymnastics can be a dangerous sport and can result in minor injuries, major injuries (including spinal injuries) and even death.

All staff running gymnastic lessons are appropriately qualified to teach the skills and lesson they have been engaged by the club to deliver.



ACTIVITY AREA GUIDANCE

Risk Assessment

The configuration, layout and programming of each gymnastics facility is unique. As such it is impossible for these guidelines to identify and provide guidance on every possible risk a club may experience within a gymnastics facility.

It is incumbent on all gymnastics clubs to clearly identify, assess, and document potential risks for each piece of apparatus or equipment within the facility.

This risk assessment should identify all possible sources of conflict between the participant using the equipment/apparatus and:

- Other persons (athletes, coaches, spectators etc.)
- Other equipment or apparatus
- Elements of the built environment such as walls, pillars and the ceiling

The risk assessment should also document the expected likelihood or probability of an event occurring and any steps which must be taken to mitigate the risk.

Additionally, other factors may be considered in the risk assessment to mitigate the risk of injury. These include the capability of the gymnast, skill progression and appropriate supervision and coaching.

ACTIVITY AREA GUIDANCE

Levels of Expected Performance

The risk profile for a single piece of apparatus will be vastly different depending on the type and capability of athlete using it.

A way for club owners and managers to identify and assess potential risks around their facility is to consider the highest level of expected performance of the athletes using the facility.

If a club reasonably expects to have athletes of an elite level using the facility, they must design and setup the activity area to cater for athletes in the higher performance category and mitigate all identified risks accordingly.

Key areas to consider in this part of the risk assessment include:

- Identifying the potential for an athlete to slip or 'ping' off the apparatus
- Potential for impact with other users (athletes and coaches)

Every club owner is expected to assess the risks associated with the activities they offer. Consideration should be given to providing adequate positioning and clearances required for the level of programs offered.

Risk assessments should be updated whenever there has been functional changes to the layout of the activity area.

ACTIVITY AREA GUIDANCE

Inspections and Maintenance

Gymnasts of all levels place a lot of trust in their apparatus or equipment. It supports the gymnast's body weight along with significant additional forces associated with the gymnastics performance. There is always a risk component that the apparatus or equipment could fail, and in the fraction of a second an athlete's motion can go from a controlled to uncontrolled motion with the potential for catastrophic consequences.

While it is difficult to eliminate the risk of equipment/apparatus components failing in all cases, regular inspections can significantly reduce the probability that it will occur due to wear and tear.

The first step in mitigating the risk of apparatus or equipment components failing is to conduct routine inspections to ensure that all apparatus and equipment is set up correctly and in proper working order.

This includes the visual inspection of:

- Lock pins and T handles are inserted correctly
- Support cables, turnbuckles and floor anchors – looking for signs of fatigue and wear
- Other potential hazards from wear and tear, such as exposed edges

Particular attention should be given to points on an apparatus which experience friction, flex or movement as these are at a higher risk of failure and therefore require a higher level of inspection (frequency and scrutiny) than parts of the apparatus which are static.

Routine inspections should consist of thorough inspections conducted on a monthly and annual basis.

ACTIVITY AREA GUIDANCE

Staff Education and Training

The responsibility of the inspector is to look for and identify any potential defects, weak points and any other sign of danger due to overstressed or broken components. For staff to appropriately understand and identify what they are looking for, they must receive training so that issues are not overlooked or incorrectly identified.

Record Keeping and Accountability

It is strongly recommended all clubs formally document and store all inspection checklists to protect the club in the event of an incident. This includes routine daily reporting of any defects and more detailed monthly or annual inspections.

Clubs should also establish internal policies and procedures to audit the inspection process to ensure these are being completed and the inspectors are satisfactorily able to identify key issues.

Apparatus Layout

As previously stated, the configuration and programming needs of each gymnastics club and facility are unique. **While the International Gymnastics Federation (FIG) provide guidelines for the layout of apparatus in a competition environment, applying these to the club situations would result in an inefficient gymnastics facility.** On the other hand, poorly designed or crowded activity areas can also be inefficient if adequate planning or design has not gone into the placement of each piece of apparatus or equipment.

It is recommended club owners/managers always seek the advice of an appropriately qualified professional to design or modify the layout of apparatus within the activity area. This will ensure the space is not only efficient but also provides a safe working environment for coaches using the activity area. When adding an additional piece of apparatus, it is important that coaches and athletes are able to continue to move safely from area to area without coming into conflict with an apparatus area. Additionally, coaches need to have adequate circulation space to ensure they can position themselves to appropriately supervise athletes.

ACTIVITY AREA GUIDANCE

Anchor Points and Floor Plates

Due to the significant forces exerted on gymnastics apparatus, support cables are required to keep the apparatus steady and maintain its structural integrity during use. These support cables need to be securely fastened to the floor either using an anchor point or floor plate. Since these anchor points are fixed into the floor, the layout of the apparatus needs to be designed prior to the installation of the anchor points.

In some facilities, owners/managers may choose to install additional anchor points to allow the activity area to be reconfigured for alternate activities such as competitions. When choosing a floor anchor system, it is important to select one that is appropriate to the floor type of the facility and that it is designed and installed by a professional.

It is important to note that floor anchor points are subjected to constant stress and movement. Over time this can cause the floor fixing to fatigue and become a potential source of failure. Anchor points and associated fixtures (shackles, chains and turnbuckles) should be visible at all times and should not be covered with matting. It is important that anchor points are accessible to allow for routine inspection both visually and physically to ensure they are in good working order.

Support Cables

Support cables are constantly subjected to dynamic loads and stress. Similar to anchor points, the turnbuckles (used to tension cables) and cables are also subjected to constant stress, which can result in a potential source of failure. Additionally, due to the dynamic forces applied through apparatus, club owners and managers should ensure support cables do not come into contact with other cables or apparatus, where the friction can create fatigue.



ACTIVITY AREA GUIDANCE

Ceiling Heights and Clearances

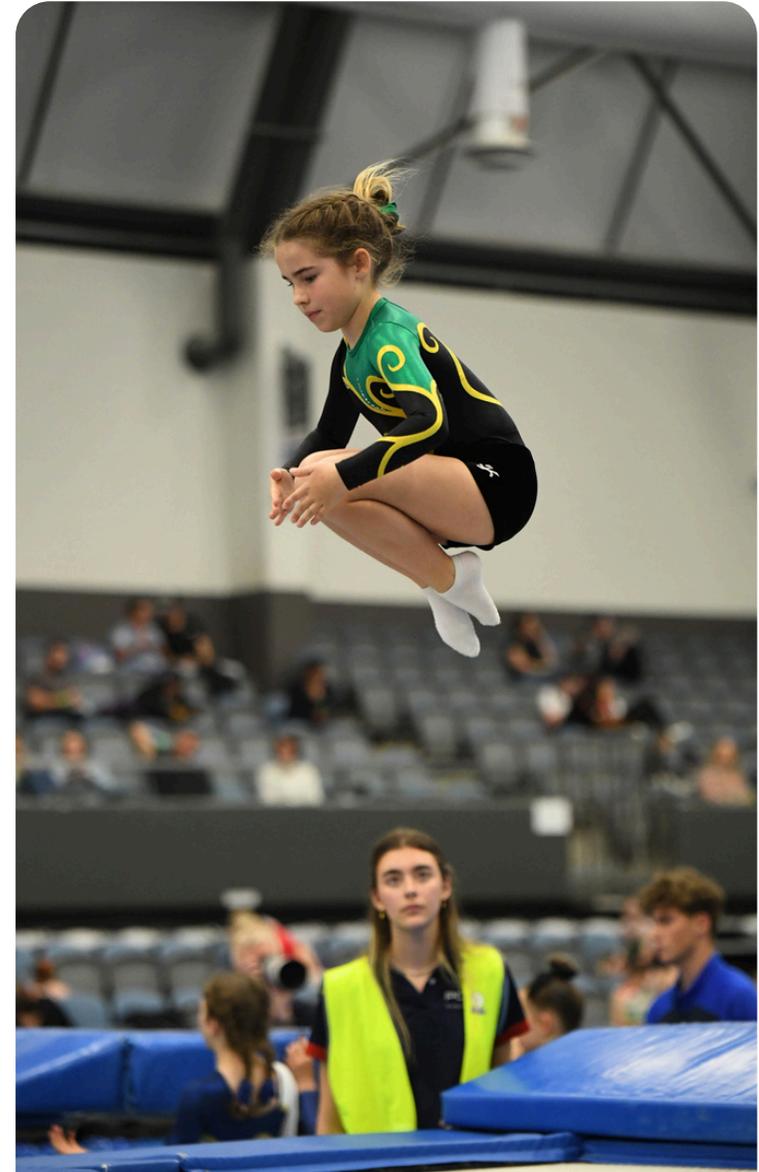
Ensuring there is adequate vertical clearance in a gymnastics facility is just as important as ensuring there is enough floorspace available. Each gym sport has different recommendations on the minimum heights required as per FIG Apparatus Norms (see table on next page).

Consideration should be given to the ceiling height requirements at the initial planning phases. The level of expected performance of any athlete using the facility should be carefully considered, including allowances for their progression in the sport.

Club owners and managers should also pay particular attention to ceiling mounted equipment such as lights, fans, and air conditioners which may reduce the vertical clearance above an apparatus.

Furthermore, layouts should ensure there is adequate clearance from moving objects, such as ceiling fans. It should be noted that it is generally not an acceptable mitigation strategy to simply turn off ceiling fans as they can inadvertently be turned on during apparatus use.

Many recreational gymnastics programs use converted retail spaces where the ceiling height can be as low as 2.4-metres. Club owners/managers need to be aware of the risks associated with low ceiling heights and ensure the level of expected performance of athletes using this space does not exceed these limitations.



ACTIVITY AREA GUIDANCE

Domestic

Gymsport	Min. Ceiling Height (Training)	Min. Ceiling Height (Competition)
Trampoline	8 metres	10-12 metres
Double Mini/Tumbling	6 metres	6-10 metres
Rhythmic	8 metres	10-12 metres
Women's Artistic	6 metres	6-10 metres
Men's Artistic	7 metres	7-10 metres
Aerobic	6 metres	6-10 metres
Acrobatic	8 metres	8-12 metres
Gymnastics for All	2.4 metres	Not Applicable

International

Gymsport	International Standard Minimum Ceiling Height	International Standard Recommended Ceiling Height
Trampoline	10 metres (8 metres for age groups)	10 metres (min.)
Double Mini/Tumbling	6 metres	8-10 metres
Rhythmic	10 metres	10 metres (min.)
Women's Artistic	6 metres	8-10 metres
Men's Artistic	7 metres	8-10 metres
Aerobic	6 metres	8-10 metres
Acrobatic	8 metres	10-12 metres
Gymnastics For All	2.4 metres	Not Applicable

The international ceiling height requirements listed above are based on international standards from the FIG Apparatus Norms and apply at an international competition level. For lower-level training or local competitions within Australia, ceiling heights may be lower than those recommended.

ACTIVITY AREA GUIDANCE

Foam Pits

The gymnastics foam pit is a cushioned landing area for gymnasts with advanced skills to train. Until a gymnast has perfected the landing portion of a tumbling pass, a vault, a rings or bars set, it is crucial to provide them with a forgiving surface onto which they can make the mistakes that are a natural part of the skills development process.

Construction of a foam pit is one of the biggest investments a club will make (apart from the facility itself) and it is the single most critical feature to the functionality of any gymnastics facility. As such, a lot of planning needs to go into the size, shape and type of pit, well before any construction commences.

Before considering the inclusion of a pit in a gymnastics facility, club owners/managers should consider:

- Who will use the foam pit?
- What skill or apparatus will be used in conjunction with the pit?
- How will the apparatus be laid out and how will it relate to the pit to ensure it fits functionally into the training flow of the gym?

To maximise utilisation of the pit, club owners and managers will need to also consider the age and abilities of the athletes using the facility. Older and more experienced gymnasts have the potential to travel further into the pit area than young beginners. This must be considered when designed which training activities use the pit area.

WARNING

Foam Pits are intended for use under the direct supervision from trained and qualified coaches. Unsupervised and improper use could be dangerous and should not be permitted.

Headfirst entries into the pit should be avoided, Even with modern loose foam, the possibility of serious injury is still a risk.

Club owners/managers should conduct a thorough risk assessment before deciding to include a foam pit in the facility.

ACTIVITY AREA GUIDANCE

Closed Pits

Closed pit systems are distinct from the traditional open foam pits as they provide a pit for "landing on" rather than "dismounting into".

Closed pit solutions are generally sold as large blocks. They have a sheet of foam at the top and a network of perpendicular foam logs arranged in a mesh format to provide air gaps within the mat which soften what would otherwise be a hard foam block. The closed pit blocks are generally covered on the top and bottom with PVC have mesh panels on the sides to allow air to escape.

Guidance Note:

There are no standards for the density, shape or type of foam used in pit systems.

Club owners/managers must consult with a suitably qualified professional or designer of the pit system, or their apparatus supplier to ensure the most appropriate foam types and shapes are selected for the specific design of the pit and context of the club.

Consideration should be given to the application of a fire retardant to the foam used in the pit systems.



Example of an Open Pit (Source: SPEITH)



Example of a Closed Pit (Source: SPEITH)

ACTIVITY AREA GUIDANCE

Types of Foam

The foam blocks which go into a foam pit is an expense which is underestimated when considering the inclusion of a pit in their facility. Not only is the initial cost of the foam significant, but foam is also a wearable and replaceable item. This should be included in the budget to prevent the degraded foam causing a potential safety risk.

The longevity of the foam blocks depends on a number of factors including:

- The number of dismounts made into the pit
- The way in which participants exit the pit
- Impact of misuse such as picking and tearing
- Deterioration from UV light from windows and skylights

Logs maintain air-gaps between the foam which reduces the build-up of 'hard areas'. Logs tend to have a shorter lifespan as they are easily torn on entry and exit. Logs are recommended for managed and lower dismount frequency pits.

Cubes are less likely to be damaged when participants land on them or climb over them. However, cubes have a tendency to "stack" and "settle" resulting in fewer air gaps. As a result, they require more frequent "fluffing" to remove hard spots. Cubes are recommended for high frequency dismount pits such as at the end of vault and tumbling tracks.

In some circumstances a combination of 'cube' and 'log' foam blocks maybe the optimal solution for a club's specific use. Clubs should seek their own independent advice from an appropriately qualified professional before selecting a foam type.

SCHEDULE OF PROVISION

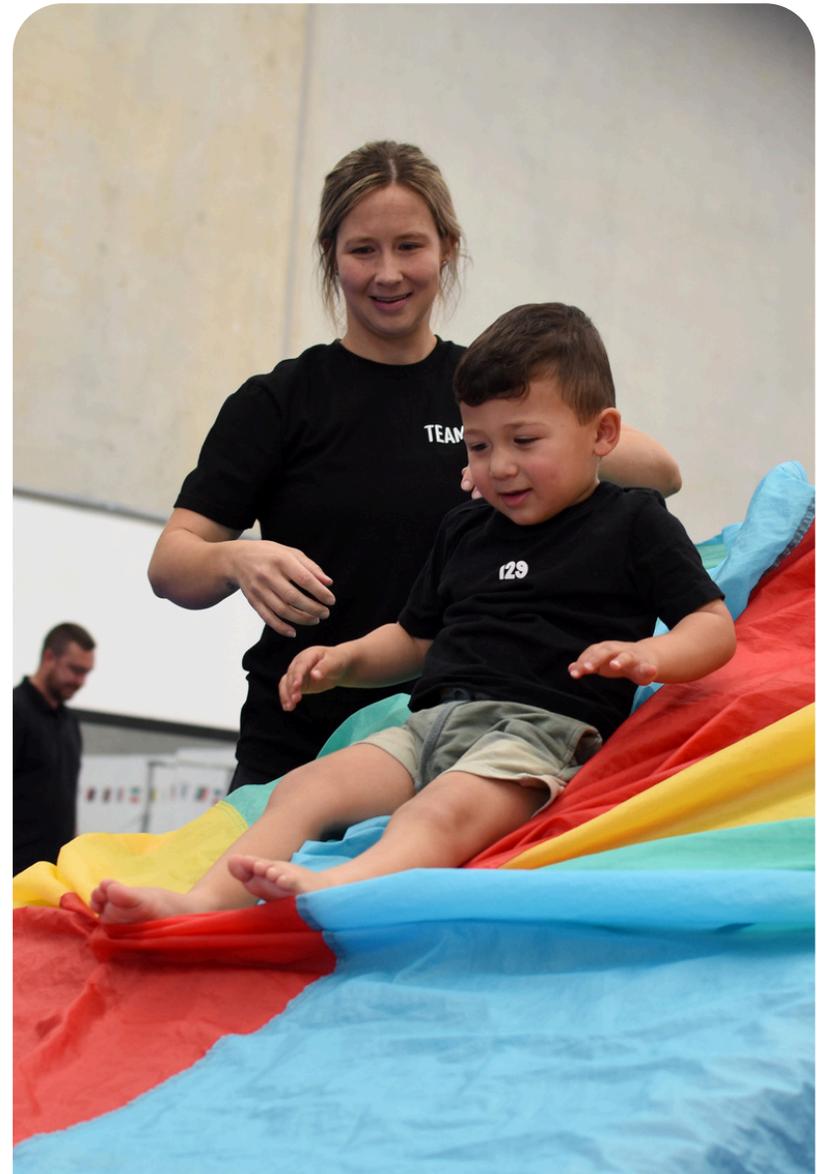
SCHEDULE OF PROVISION

Ancillary Amenities

The following pages provide a schedule of provision for ancillary amenities such as changerooms, toilets, meeting rooms and office/administration spaces.

The schedule of provision provides for a suggested minimum allocation of space for each amenity at each level of the facility hierarchy. When designing the facility, consideration should be given to the estimated peak usage of the facility when determining the appropriate number of toilets, wash basins, etc.

The projected club size and core purpose of the facility (i.e. Foundation of Gymnastics Performance or Competition Preparation) should also be considered, as well as allowances for additional office space to support a professional work environment for coaching staff.



Amenities	Facility Component				Preferred Minimum Size			
	Local	Community	Regional	State	Local	Community	Regional	State
Changeroom	O	D	E	E	Min 1 room 20m2	Min 1 room 30m2	Min 2 rooms 20m2	Min 2 rooms 30m2
Showers	X	X	O	D	N/A			
Participant Toilets	D	D	E	E	1 rooms min 12m2 Min 1 WC & 1 HB in each room		2 rooms min 12m2 Min 1 WC & 1 HB in each room	
Spectator Toilets	D	E	E	E	1 room min 10m2 Min 1 WC & 1 HB in each room	2 room min 10m2 Min 1 WC & 1 HB in each room	2 rooms min 12m2 Min 2 WC & 2 HB in each room	
First-aid Room	D	E	E	E	1 room min 10m2		1 room min 15m2	1 room min 20m2
Canteen/Kiosk/ Kitchen	O	O	D	D	Kitchenette within staff/lunch room		40m2 Preparation/ service area	50m2 Preparation/ service area
Spectator/ Viewing Space	O	D	E	E				
Parents Room	X	O	O	D	N/A	1 area - unisex min 8m2 1WC, 1HB, 1 baby change table		
Managers/ Coaches Office	D	E	E	E	Min 1 office 15m2	Min 1 office 20m2	Min 1 office 25m2	Min 1 office 25m2

Essential (E), Desired (D) or Optional (O)

SCHEDULE OF PROVISION

Comments and Specifications

- **Changeroom** - Changerooms should be accessible directly from the gym floor.
- **Showers** - Shower facilities can pose a child safety risk within gymnastics facilities. Their usage by users should be minimised.
- **Participant Toilets** - Participant toilets should be easily accessible from the gym floor.
- **Spectator Toilets** - Accessible toilets are a key component of all gymnastics facilities and should be provided as appropriate at each hierarchy level. It is recommended accessible toilet facilities be accessible from both the gymnastics floor and communal/spectator spaces. The final floor area and fit out of toilet amenities will be dependent on building codes and requirements, identified site uses and forecast spectator attendances for both events and training.
- **First-Aid Room** - In upper levels of the hierarchy, this area needs to include a sink with hot and cold water, treatment bed, sharp disposal container, soap dispenser, hand towel dispenser. The room must be regularly cleaned, have adequate lighting (angle poise light/s), telephone (for use in emergency), first-aid kit, emergency contacts for nearest hospital, doctor, dentist, etc. The room should be lockable to ensure security of first-aid materials and equipment.
- **Canteen/Kiosk/Kitchen** - The standard and level of kitchen provision (community or commercial) will be dependent on the current and forecast level of use and overall purpose of the venue. Planning of these spaces should be coordinated between tenant club, user groups and with landowner or funding providers. Where possible, kiosks and serveries should allow staff in the kiosk to be able to view the gym floor and have the capacity to serve both the main spectator area and any multi- purpose/function rooms.
- **Spectator/Viewing Space** - Located close to the canteen/kiosk area.
- **Parents Room** - Unisex space with direct access via a connecting doorway, to accessible and ambulant toilets. Adequate circulation space for a person using a pram, stroller or wheelchair to move around easily and access all fixtures and fittings within the space, for example, baby change table, wash basin and nappy bin.
- **Managers/Coaches Office** - A designated administration area to provide club management to perform administrative tasks and conduct private meetings if required. The administration area should provide access to technology connections, internet, telecommunications and include space for workspaces, computer, shelving, storage etc.

Amenities	Facility Component				Preferred Minimum Size			
	Local	Community	Regional	State	Local	Community	Regional	State
Reception/Administration Space	O	D	E	E	Min 10m2			
Foyer/Reception	E	E	E	E				
Multipurpose/function room	X	O	D	E	N/A	75m2	75m2	90m2
Meeting Room	X	O	D	E	N/A	1 room min 12m2		2 rooms min 12m2
Staff/Lunch Room	O	D	E	E	Min 12m2	Min 15m2		Min 15m2
Utilities/Plant Room	X	O	O	E	As required.			
Equipment Storage	E	E	E	E	Min 20m2	Min 25m2	Min 40m2	
Cleaners Store	O	D	E	E	Min 5m2			
Car Parking	D	E	E	E	As required.			
Doping Control Room	X	X	O	D	N/A		1 room min 15m2 Min 1 WC & 1 HB in each room.	

Essential (E), Desired (D) or Optional (O)

SCHEDULE OF PROVISION

Comments and Specifications

- **Reception/Administration Space** - A multi-purpose space that can be used as an administration hub by club/facility managers, volunteers, coaches, etc. This space should form part of the central control point of the facility.
- **Foyer/Reception** - Sufficient circulation space to allow for waiting parents collecting their children between classes.
- **Multi-purpose/function room** - Size requirements for multi-purpose/function rooms will vary depending on the size of the club (number of members) and site constraints. Multi-purpose/function rooms should have appropriate access to the kitchen or kiosk.
- **Meeting Room** - Small room used to conduct private meetings or as a breakout room for larger functions using the multipurpose/function room.
- **Staff/Lunch Room** - Should provide room for a small table and chairs and have provision for a fridge and small kitchenette.
- **Utilities/Plant Room** - A separate utilities/plant room should be provided for any essential facility services. Size and requirements will be dependent on the servicing of the overall gymnastics facility.
- **Equipment Storage** - Adequate internal storage is required within all gymnastics facilities. Internal storage areas should provide space for storage of equipment and apparatus, administration archives, uniforms, event supplies, tools, cleaning supplies, merchandise, etc. Shelving and fixtures that promote safe manual handling practices and provide flexible use, should be incorporated into the design to achieve maximum storage capacity and usage. Consideration for storeroom doors to be designed to be large enough and allow easy access to move equipment in and out.
- **Cleaners Store** - Fit out to include an appropriate cleaner's sink, hot and cold water, shelving hooks and drainage.
- **Car Parking** - Type and number of spaces to be determined by traffic/parking assessment. Provision may be varied by the inclusion of a designated drop-off/pick-up area. Accessible car parks to be provided in accordance with regulations. State and National facilities should include provision for bus parking.
- **Doping Control Room** - As per Sports Integrity Australia (SIA) or World Anti-Doping Authority (WADA) requirements.

CONCEPT PLANS

CONCEPT PLANS

Introduction

This section provides concept plans for facility layouts and functional design guidance based on different levels of the National Facilities Hierarchy. These layouts can be used to develop a project brief for building designers or architects.

Each concept plan provides an indication of provision requirements for key amenities required to support the diverse range of activities which can be delivered within the gymnastics club environment.

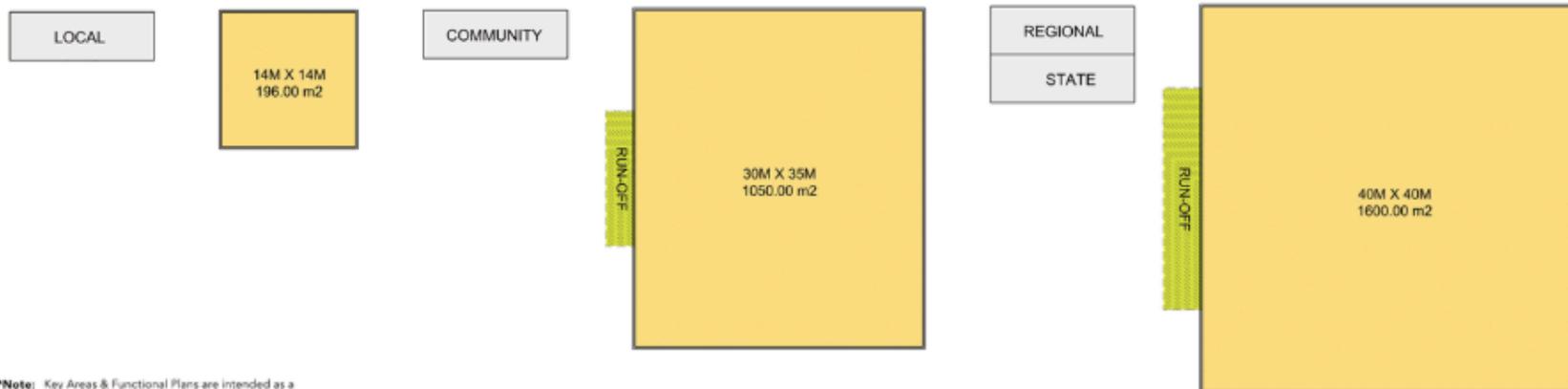
As each facility will be different and the chosen management models will vary between clubs, the following concept plans should be used as a guide only to assist designers and architects in developing more detailed plans/concepts while the facility's dimensions may change.

These examples can be used to:

- Plan new facilities
- Plan how existing buildings can be modified to accommodate a gymnastics club
- Identify opportunities to redevelop existing facilities to incorporate any or all of the amenities identified

CONCEPT PLANS

	LOCAL	COMMUNITY	REGIONAL	STATE
DOPING CONTROL				
CLEANERS STORE				
EQUIP. STORE				
STAFF LUNCH				
MEETING				
MULTIFUNCTION				
POYER ENTRANCE				
RECEPT. ADMIN.				
HAN/COACH OFF.				
PARENTS ROOM				
CANT./KIOSK/KITCH.				
FIRST AID ROOM				
SPEC. TOILETS				
PART. TOILETS				
CHANGEROOM				
LOCAL	15-20 PATRONS	60-100 PATRONS	60-150 PATRONS	150 PATRONS



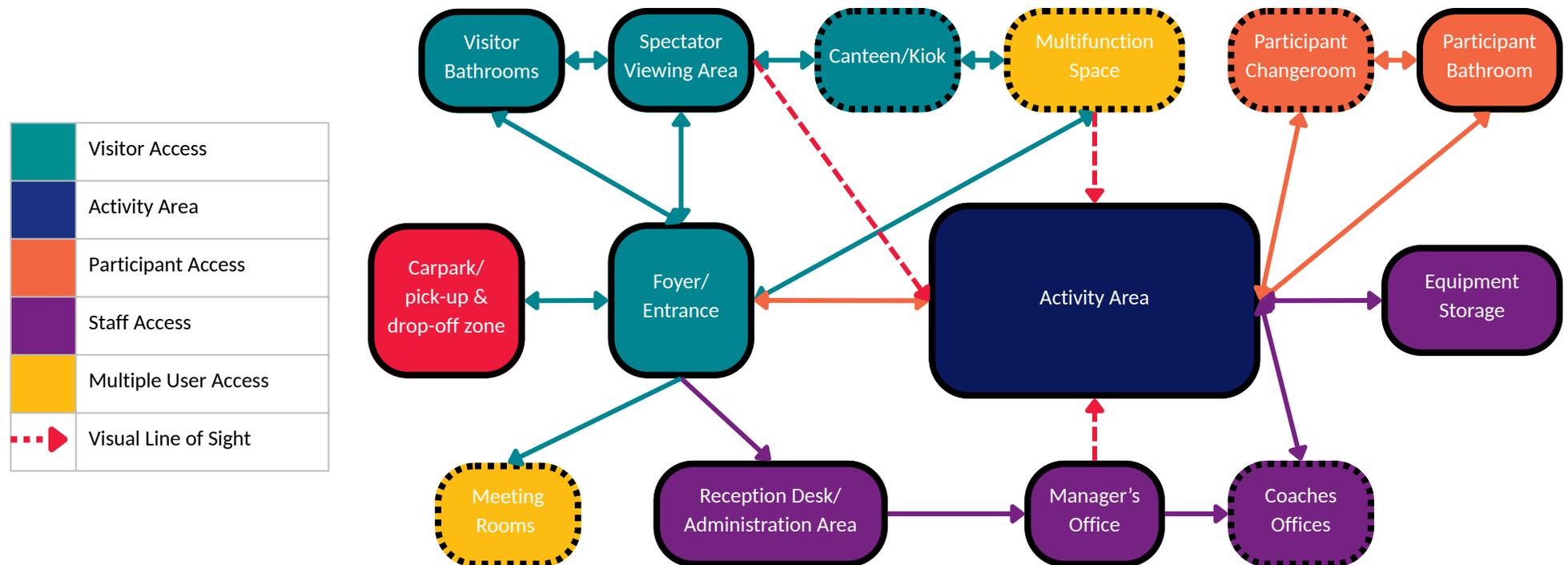
****Note:** Key Areas & Functional Plans are intended as a guide only and not illustrated to scale.

CONCEPT PLANS

Functional Relationship Diagram

The following diagram represents the functional relationships between the activity area and the auxiliary amenities in a gymnastics facility. As each facility and site is unique, this diagram should be used as a guide to ensure the design of a facility considers the critical functional elements and relationships of a gymnastics facility.

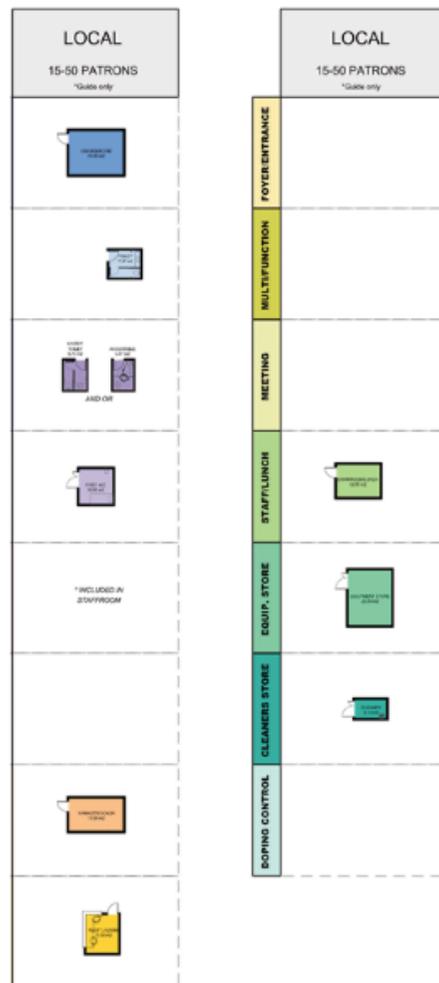
- Amenities with **solid borders** represent core facility amenities.
- **Dotted borders** represent optional or desirable amenities in high level facilities of the hierarchy which are required to accommodate additional participant, staff or spectator needs.



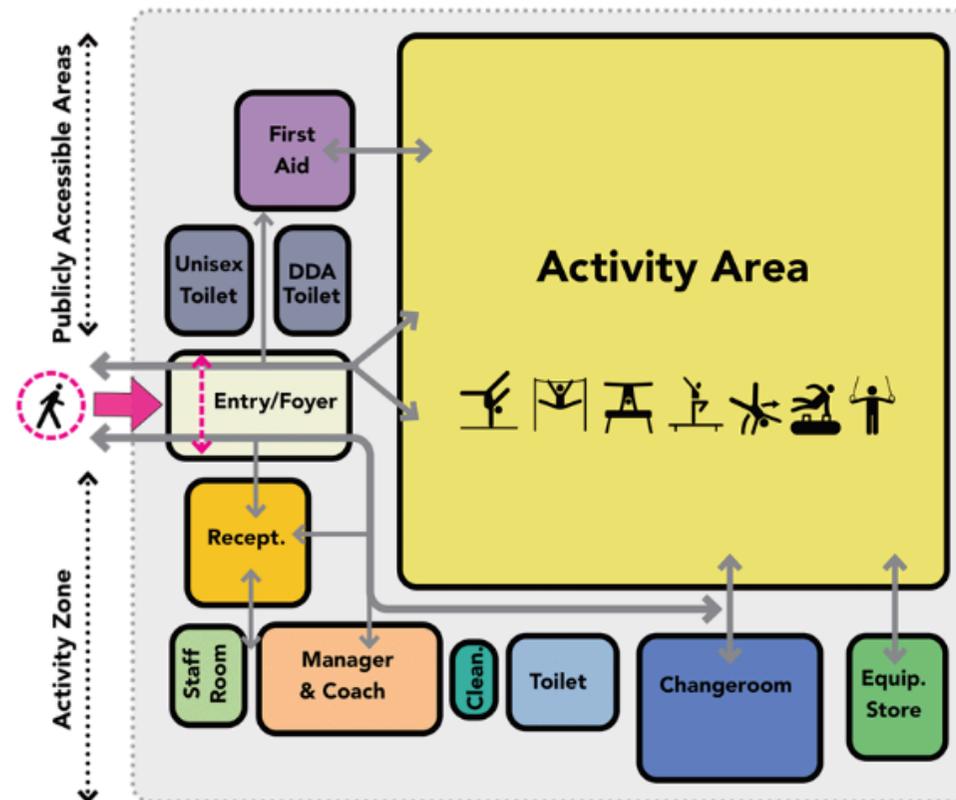
LOCAL FACILITY CONCEPT

01 Key Areas Local Facility

****Note:** Key Areas & Functional Plans are intended as a guide only and not illustrated to scale.



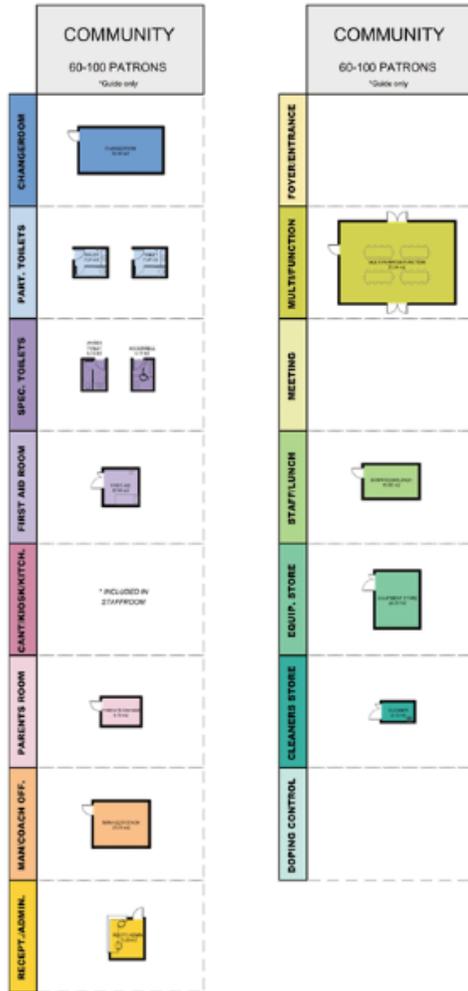
02 Functional Diagram Local Facility



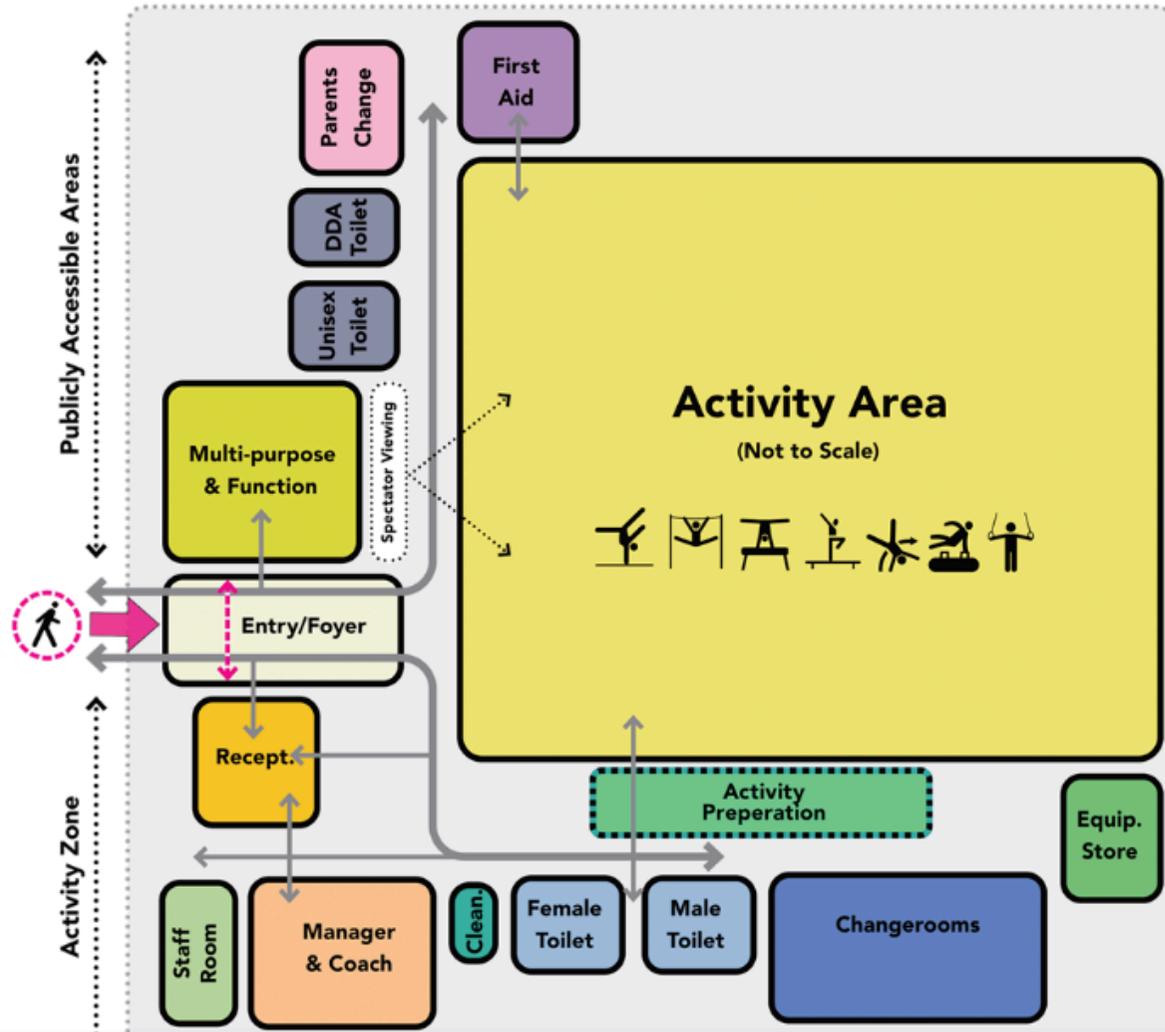
COMMUNITY FACILITY CONCEPT

01 Key Areas Community Facility

****Note:** Key Areas & Functional Plans are intended as a guide only and not illustrated to scale.



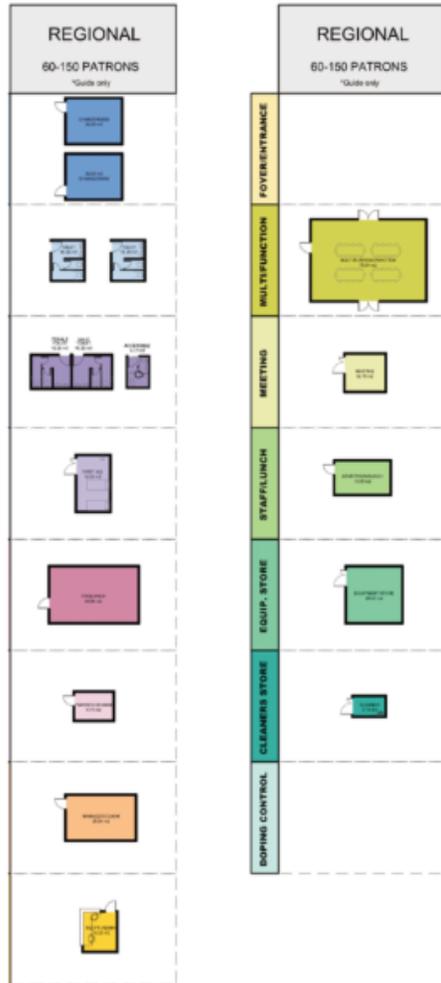
02 Functional Diagram Community Facility



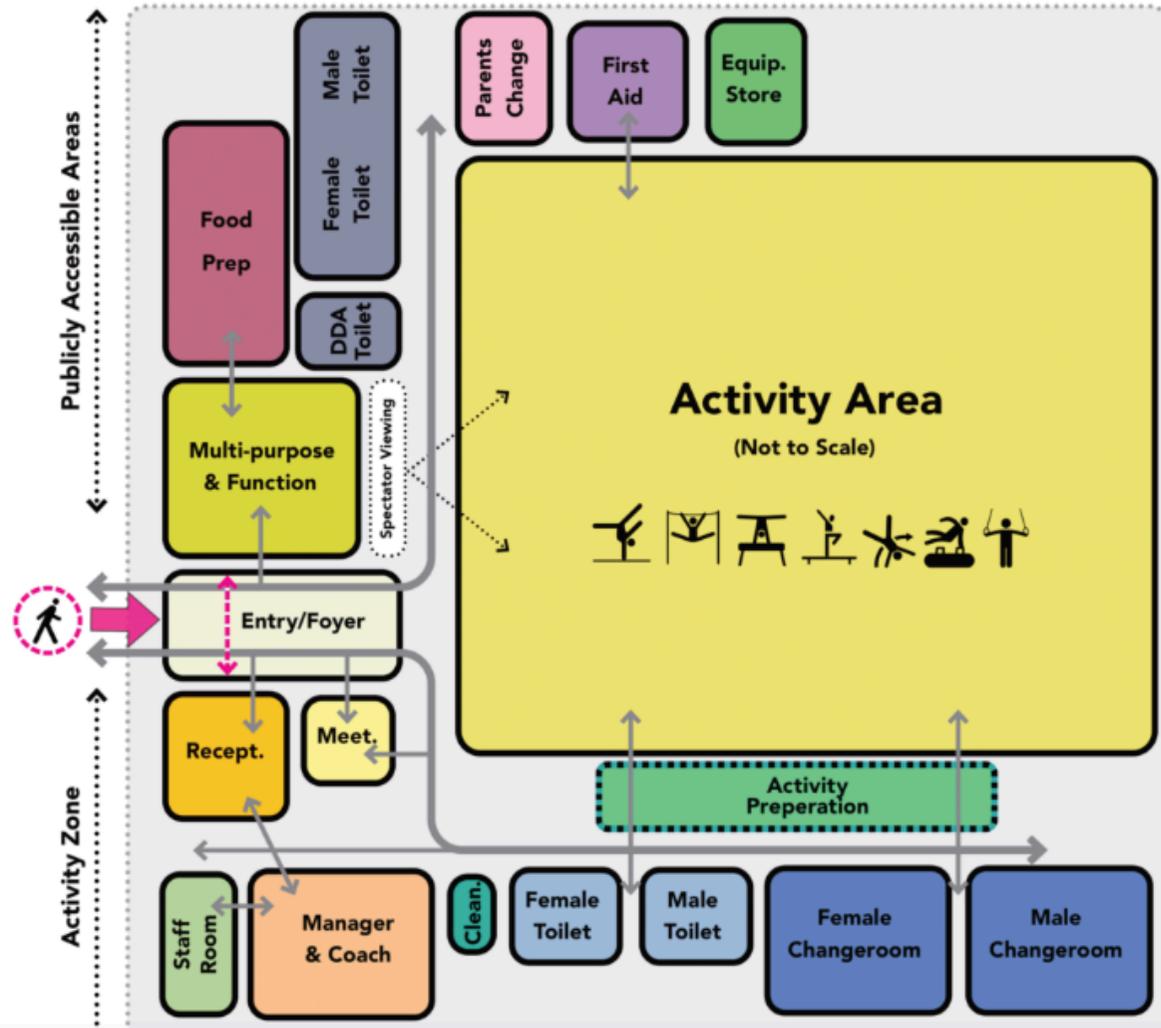
REGIONAL FACILITY CONCEPT

01 Key Areas Regional Facility

**Note: Key Areas & Functional Plans are intended as a guide only and not illustrated to scale.



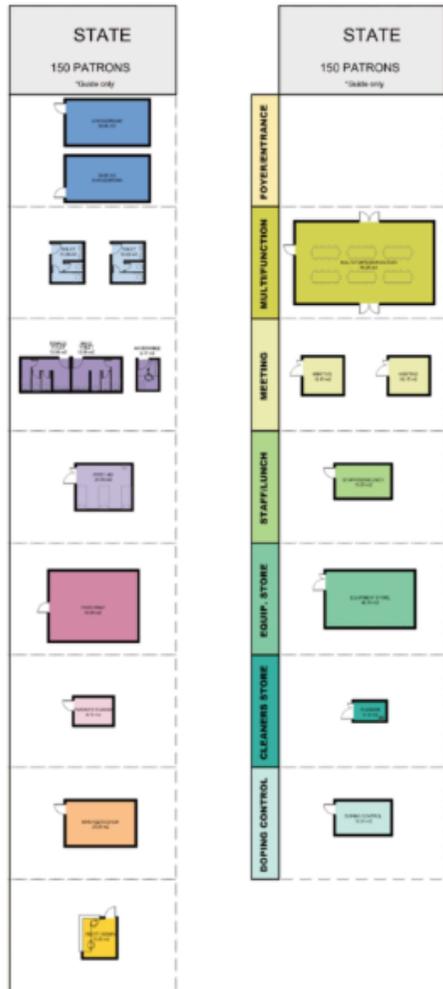
02 Functional Diagram Regional Facility



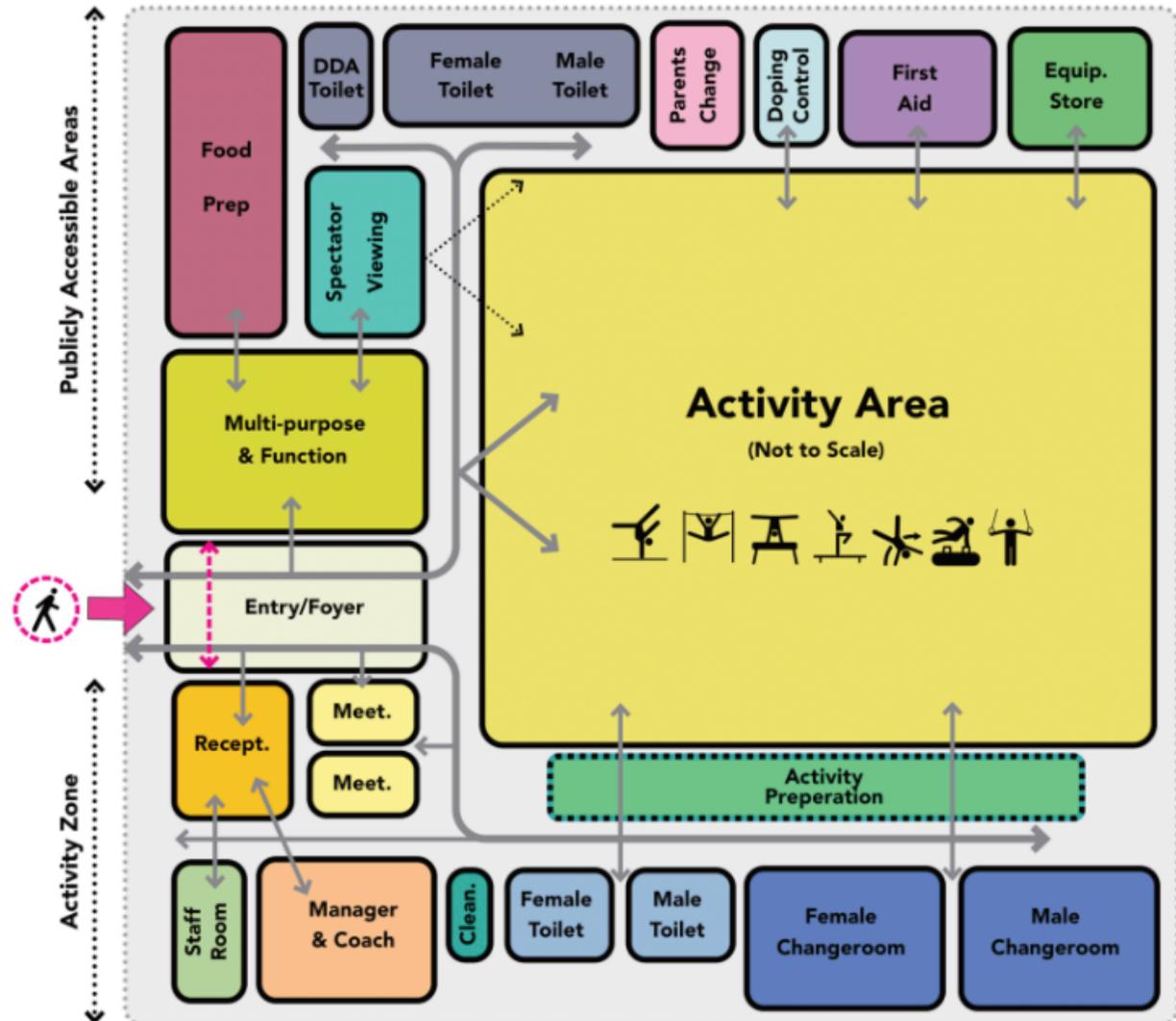
STATE FACILITY CONCEPT

01 Key Areas State Facility

****Note:** Key Areas & Functional Plans are intended as a guide only and not illustrated to scale.



02 Functional Diagram State Facility



ACKNOWLEDGEMENTS

The Gymnastics Australia National Facilities Guidelines has been developed as a collaborative project between Gymnastics Australia, SBP Advisory, state and territory gymnastics associations, and The OCD, with input and guidance provided by gymnastics stakeholders, local government, and design industry professionals.

Particular thanks to Gymnastics Victoria, Gymnastics WA, and Gymnastics Tasmania for their financial contribution to the development of this resource.

Further information and recommendations have also come from stakeholder consultation with representatives from the following organisations:

- Amco Gymnastics
- R&L Sports
- Edge Gymnastics (Victoria)
- Essendon Keilor Gymnastics Academy (Victoria)
- BTYC Gymnastics (Victoria)
- Twisters Gymnastics (Victoria)
- Gymsports (Tasmania)
- Delta Gymnastics (Queensland)
- Manly – Warringah Gymnastics Club (New South Wales)
- Northern Districts Gymnastics Club (Western Australia)
- High Flyers Trampoline and Gymnastics Club (Western Australia)
- Peak Trampoline (Western Australia)
- Vital Gymnastics (Western Australia)
- Gungahlin Gymnastics Club (ACT)

SOURCES AND RESOURCES

Information from the following sources have been referenced in the development of this resource.

- **Australian Government Disability Standards** www.legislation.gov.au/Details/F2010L00668
- **Australian Government Department of Environment and Energy** www.environment.gov.au
- **Australian Government Protective Security Policy Framework** www.protectivesecurity.gov.au
- **Australian Human Rights Commission** www.humanrights.gov.au/our-work/legal/legislation
www.humanrights.gov.au/our-work/disability-rights/disability-standards
- **Australian Institute of Designers Environment Design Guide** www.architecture.com.au/services/edg
- **Sport Australia** www.ausport.gov.au
- **Australian Sports Foundation** www.asf.org.au
- **The Building Code of Australia** www.abcb.gov.au
- **Jobs and Skills Australia** <https://www.jobsandskills.gov.au>
- **International Gymnastics Federation (FIG)** <https://www.gymnastics.sport/site/>
- **Clearinghouse for Sport** <https://www.clearinghouseforsport.gov.au/>

