

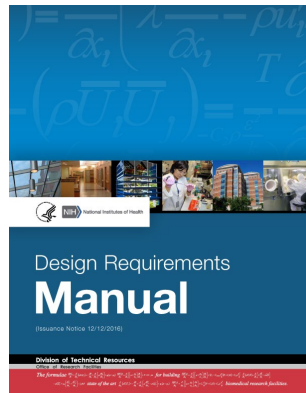
## DTR Permit Review: BOD for Health Care Projects

### Introduction

The National Institutes of Health (NIH) Permit Review Board<sup>1</sup> reviews construction, renovation, alteration, major equipment installation, or change of use projects funded by NIH. Project review occurs through the Division of Technical Resources (DTR) Permit Review Site.

### The Design Requirements Manual

In addition to complying with model building codes, DTR promulgates minimum facility standards through the Design Requirements Manual (DRM).<sup>2</sup> Section 1.2.1 lists the codes and standards incorporated in the DRM by reference. The Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospitals<sup>3</sup> is one of these referenced standards that is used in concert with other codes and standards to review health care projects.



Guidelines so that the correct codes and standards are used during development as well as review.

The elements of the FGI Functional Program are:

- the purpose of the project and services to be provided
- the project type, e.g. renovation, and size
- the existing/proposed building construction type (per the International Building Code)
- the existing/proposed occupancy classification (per NFPA 101)
- department operational adjacencies, circulation patterns, etc.

The Space Program is another document required by the FGI which is helpful to designers and reviewers. It lists each room name with the relevant Guidelines paragraph number to coordinate technical requirements with rooms. It should also be included in the BOD.

### Summary

Health care projects at NIH must include the correct occupancy classification as well as documentation from the Clinical Center about the uses of rooms. The clearest way to ensure the correct engineering and architecture criteria are applied is to use the FGI Functional Program and Space Program from the start of the project. Identify the uses of spaces, room names, department affiliations, etc. according to the terms used in the FGI Guidelines to create consistent documentation between user criteria, Construction Documents, and DTR Permit Review. Additional policies, standards, and design requirements will be discussed in a forthcoming article.

### Additional Reading

1. News to Use: The Design Review Process  
[https://www.orf.od.nih.gov/TechnicalResources/Documents/News%20to%20Use%20PDF%20Files/2017%20NTU/The%20Design%20Review%20Process%20-%20November%202017\\_508\\_508.pdf](https://www.orf.od.nih.gov/TechnicalResources/Documents/News%20to%20Use%20PDF%20Files/2017%20NTU/The%20Design%20Review%20Process%20-%20November%202017_508_508.pdf)
2. The National Institutes of Health (NIH). Design Requirements Manual, (Issuance Notice 12/12/2016) Rev. 1.5: 03/5/2020  
<https://www.orf.od.nih.gov/TechnicalResources/Pages/DesignRequirementsManual2016.aspx>
3. The Facility Guidelines Institute. Guidelines for Design and Construction of Hospitals and Outpatient Facilities, 2018 ed. Chicago: American Society for Healthcare Engineering, 2018  
<https://fgiguideines.org/guidelines/2018-fgi-guidelines/>

### Governing Codes and Standards

The NIH Division of the Fire Marshal (DFM) is the Authority Having Jurisdiction interpreting and enforcing Life Safety codes and standards. The Fire Protection and Life Safety Building Permit Process requires use and occupancy classification to comply with the most recent National Fire Protection Association (NFPA) 101 Life Safety Code. Most health care building renovations in the Clinical Research Center (CRC) have the occupancy classifications Health Care, Ambulatory Health Care, or Business, as described in Chapter 6 of NFPA 101. Health care projects must also meet NFPA 99 Health Care Facilities Code requirements. The Joint Commission (TJC) publishes its own hospital standards which are used to accredit hospitals in the U.S., but TJC currently utilizes a different version of NFPA 101 from NIH. If a conflict arises between the most recent version of the NFPA 101 Life Safety Code and the version required by TJC, the most stringent requirements should be used with DFM's concurrence.

### Guidelines for the Design and Construction of Hospitals

The FGI Guidelines requires clinical care staff to develop and document a Functional Program during the planning and design phases of every project. The best way to create consistent documentation between FGI requirements and DTR Permit Review is to include the Functional Program developed by the Clinical Center in the Basis of Design (BOD). The BOD is a record of the design process, including all requirements, and should coordinate spaces and their technical requirements in accordance with the FGI

