

SECTION 102.109 – ERGONOMICS GUIDELINE

PART 1 - INTRODUCTION

1.01 GENERAL

- A. This guideline establishes certain requirements regarding ergonomics, identifies the standards for BJC HealthCare, and indicates general requirements for implementing the standards.
- B. The ergonomic standards referenced in this guideline, referred to herein as the “standards”, includes the following documents.
 - 1. *“Ergo Food Services Standards”*
 - 2. *“Ergo Housekeeping Standards”*
 - 3. *“Ergo Lab Standards”*
 - 4. *“Ergo Nurses Station Standard”*
 - 5. *“Ergo Office Standards”*
 - 6. *“Ergo Pharmacy Standards”*
- C. The most current version of the standards shall apply, unless otherwise directed. The standards may be updated frequently. As a result, the standards are only available electronically and are not included in the printed version of this Manual of Practice. To obtain a copy of the current standards, download the electronic files or contact BJC Ergonomic Project Manager, Design Project Manager, or Corporate Architect.
- D. The standards have been developed and are maintained by BJC Occupational Health and Ergonomics and provided for reference.
- E. This guideline applies to all building types and all locations where BJC HealthCare staff, patients and/or visitors are expected.

PART 2 - GUIDELINE

2.01 GENERAL

- A. This guideline serves to highlight the architectural requirements associated with the ergonomic standards. The standards suggest minimum and maximum limits for certain elements, including counter heights. In an effort to provide specific dimensional information, especially for built-in cabinets and counters, the information below has been inferred from the standards and provided herein as the expectation for all projects.

- B. Both the guideline and the standards should be reviewed by the architect and engineers and any questions or concerns should be brought to the attention of the BJC Ergonomic Project Manager, Design Project Manager, or Corporate Architect.

2.02 COUNTER HEIGHT

- A. Countertops for Seated Workstation Conditions. This is a built-in workstation condition (counter workstation with no base cabinets) where seated work will occur.

- 1. Typical conditions. The primary example is a computer workstation surface. The top of counter shall be 28.5" above finished floor. This is required for all seated work conditions except where precision work is being done and/or where taller stools are provided (labs, etc.).
- 2. Tall chairs and precision work. In rare instances where higher chair heights are provided and seated precision work is expected, the top of counter will greatly depend on the specific factors. In these instance, the height of counter shall be determined by the BJC Ergonomics Project Manager.

Counter height for seated workstation conditions: 28.5" above finished floor, typical

- B. Countertops for Base Cabinet Conditions. This is a counter installed on top of base cabinets and seated work is not intended. This condition includes locations where typical drop-in or under-counter mounted sinks will be installed in the counter.

- 1. Typical conditions. The top of counter shall be 34" above finished floor and shall comply with the Americans with Disabilities Act (ADA).
- 2. Under-counter equipment condition. In some instances, equipment beneath the counter may be scheduled which requires 36" high counters for clearance. In this instance, coordinate with BJC Ergonomics Project Manager. When the under-counter equipment condition exists in a single counter run, 36" height shall be provided for the entire run of counter and the counter shall not transition vertically in that run.

Counter height for base cabinet conditions: 34" above finished floor, typical

- C. Countertops for Standing Workstation Conditions. This is a condition where counters are installed to support work performed in a standing position. This condition is not intended for seated work and this condition is uncommon. The counter heights are indicated below based on the expected work. While a counter at 34" above finished floor is within the range for heavy and light

- 1. Typical conditions. The top of counter shall be 34" above finished floor and must be approved by the BJC Ergonomic Project Manager.
- 2. Precision work requirements. In areas where sanding precision work is expected, the height of the counter shall

Counter height for standing workstation conditions: 34" above finished floor, typical

be confirmed with the BJC Ergonomic Project Manager. In general, the counter height range is between 37 and 43” above finished floor.

2.03 REACH RANGE

- A. All wall mounted shelves or any shelf within wall cabinets are not permitted to be located over 60” from the top surface of the shelf to the finished floor. This includes the top surface of a wall cabinet’s fixed bottom panel.

2.04 SHOWER PAN SLIP RESISTANCE

- A. Slip resistance for bathroom plumbing fixtures (pre-manufactured shower pans) are measured in accordance with the requirements of ASTM F462. All bathroom plumbing fixtures (pre-manufactured shower pans) shall pass the ASTM minimum requirements (meet or exceed the minimum coefficient of friction of 0.04).

PART 3 - DOCUMENTATION – Not used.

PART 4 - SUPPORTING INFORMATION – Not used.

END OF DOCUMENT

RESPONSIBILITY MATRIX

The following matrix identifies those individuals, roles or departments responsible for maintaining the accuracy of the information and those responsible for providing input. Refer to Preface for detailed explanation.

	BJC HealthCare													Hospital/Entity				
	PD&C						Clinical Asset Management (CAM)	Risk Management	Real Estate	Ergonomics	Infection Prevention (IP)	Info Systems, Data, Telecom (IS)	Other:	Standards Review Committee	Facilities Engineering	Housekeeping	Security	Other:
	Corporate Architect	Corporate Engineer	Director of Planning	Director of Design	Director of Construction	Other:												
Primary Authorship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary Authorship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DOCUMENT REVISION HISTORY

The following table indicates the date the document originated and any subsequent revisions.

Document 102.109 – Ergonomics Design Guideline		
Issue	Description of Issue	Prepared by
2012 v1	Original Issue	G. Zipfel
2014 v1	reach range, counter height, shower pan slip resistance	G. Zipfel
2016 v1	reissued	G. Zipfel
2018 v1	reissued	G. Zipfel