GENERAL
In general, follow the guidelines below when designing and specifying impact resistant wall protection. Unless specifically indicated otherwise, these guidelines are not intended to restrict or replace professional judgment.

1. All material selections and product selections shall be coordinated with UMHHHC Design Manager and Interior Design. All color selections shall be by UMHHHC Interior Design. For further information on UMHHHC Interior Design Guidelines see here.

2. On renovation projects, care should be taken to match existing conditions and extend new materials to nearest corner or other natural break.

3. UMHHHC Preferred Manufacturers:
   a. Construction Specialties Inc.
   b. In Pro
   c. Pawling Rubber Comp.
   d. Other products as approved by Design Manager and Interior Designer.

DESIGN REQUIREMENTS
General: Blocking should be provided behind the drywall at handrails and crash rails.

1. Wall protection falls into several categories:
   a. Handrails
   b. Crash Rails (Wall bumpers)
   c. Corner Guards
   d. Sheet wall protection

2. Handrails: A solid, one piece handrail system is preferred. Handrail ends should return to the wall. Be certain that color matching is within acceptable ranges between corner pieces and main runs. Handrails may be hardwood or plastic.
   a. C/S Group Acrovyn Handrail HRB-4C is the design standard.
   b. C/S Group Model SK-2, Maple Wood with natural finish: 008 (is the design standard for hardwood handrails at University Hospital). Returns would have mitered angle returning to the wall along with an additional leg of approx. 3-1/2” which would return on the face of the handrail. Endcaps are to be field spliced to the run of handrail by the installer.

3. Crash Rails: May be stainless steel, plastic or wood.
   a. C/S Group Acrovyn Handrail SRC-64 is the design standard

4. Corner Guards: May be plastic on metal retainers, or stainless steel. Use surface-mounted rather than recessed. Corner guards should start at the top of the wall cove base and extend full height. Full height is preferred unless matching existing. They should be specified at all corridor outside corners, and all outside corners in areas subject to heavy cart, staff and patient traffic. Use 3” in width unless at end walls. End caps at wing walls should have two, 2” wide cornerguard with a flat sheet wall protection in between. but must contain a high impact filler strip in between the same finish.
   a. C/S Group Acrovyn SM-20 is the design standard.

5. Sheet Wall Protection:
   a. Usually use 0.060 inch thickness for Acrovyn. Consider use at service areas, corridors, and in wheelchair and equipment storage alcoves. Typically, no additional trim is installed, and joints are caulked. The product should run from corner-to-corner, and a full wainscot from approx. four feet AFF is preferred over a narrow rub rail.
   b. Height and trim details are to be coordinated with FPD on an individual project basis.
      i. C/S Group Acrovyn 0.060” High Impact wall covering is the design standard.
      ii. C/S Acrovyn “Parchment” #253 is the UMHHHC standard neutral color.
   c. Other options include:
      i. Fiber Reinforced Laminate (FRL): Use .088 inch thickness
ii. Spectrim: Use .50 inch thickness

6. **Fiber Reinforced Plastic (FRP) Board:** may be considered in operating room suite, hallways, janitor closets, equipment storage and other back of the house areas.

7. **Door Frame Protector:**
   a. C/S Group Acrovyn B1 or D1 door frame protector shall be the design standard.

8. **Door hardware deflector:** In general use stainless steel trim protector bar as listed in Finish Hardware rather than a high impact plastic knob protector.

9. **Re-finishing:** Wall protection is designed to be factory finished. It is not intended to be painted, and should not be painted, except under certain circumstances.
   a. **Flat sheet wall protection:** Where the UMHHC neutral color flat sheet stock (Acrovyn Parchment #253) is installed on a neutral colored painted wall, it does not need to be painted. Where neutral Acrovyn is installed wall-to-wall on an accent wall, it typically does not need to be painted. If neutral Acrovyn is installed as a patch on an accent wall, such as within an inpatient room, it will be caulked and painted to match the wall.
   b. **Corner Guards, Crash Rails, Handrails:** Should not be painted.