

# Level Commandments

## OVERVIEW

The level commandments are a set of rules and dimensions to aid in the standardization of the SDIF level design process. However, there are and will always be cases where the rules need to be broken. Never should these guidelines interfere with the creative design process and they are expected to be challenged from time to time.

## SPACE METRICS

Space Metrics		
Scale	Units of 10	1 inch = 1 game unit
Min Walk Space	50	
Walls Depth	10	Interior and Exterior
Room	Smallest 100x100	Note that a room this size will not hold a fire team. Keep that in mind when making any rooms that the team is expect to travel into. 100x100 is not really a room it's a closet.
Ceiling Height	Standard 120	Use 20 inch increments. Note that for atypical spaces with long walls and rooms the ceiling will need to be raise to prevent the tunnel effect.
Floor Depth	10	
Doors	Standard 50x90	
Windows	Standard 40 wide	No less than 30 wide
Stairs	Standard 10x10	Depth Can be < or > 10
AC: Min Width	30	Note that 20 width can be used but it will force the peak state.
AC: Crouch Height	40 min – 50 max	
Full Cover	60+	Note that walls at 60 height are not recommended since the player can kind of see over. It's better to be clear and put a window/wall at 70 so there is no confusion about its cover status.
Angled walls	45 degrees	
Basements	???	

## STRUCTURE RULES

Structure Pieces		
2 way corner		
3 way corner		
4 way corner		
Pillars	Overhangs & door jams	
Lentils / Headers	All windows and doors	This is to make sure the bricks above a window frame will collapse
Longest structure piece	200	Ideally try to prevent sections as long as this to help compartmentalize the destruction of a building.
Shortest	20	Overhangs less than 80 in length probably don't need the floating end supported with a vertical structure.
General Rule 1.		Tie a horizontal structure to the ground with a vertical piece. Typically this will be the corners or door frames
General Rule 2.		Feel free to use structure as a design element in buildings. there are many examples of this in Fallujah.
General Rule 3.		Structure pieces do not have to have steel beams or rebar the bricks themselves can be the support.
General Rule 4.		Buildings over 2 floors should have either or both rebar and steel beams in the structure.

General Rule 5.

Goal is to not have floating bricks!

### DAMAGE MATERIALS

Brittle	2+ damage to kill	Glass, pottery etc
Soft	150+ damage to kill	Wooden objects such as a light interior door, book self, table. Plaster wall
Medium	900+ damage to kill	Generally a light brick and mortal construction such as a courtyard, or terrace wall. Interior walls as also medium.
Hard	1800+ damage to kill	Exterior building walls either harden concrete or thick bricks
Super	2040+ damage to kill	Steel beams, reinforced concrete, rebar etc
Default	Invincible	

### ROAD METRICS

Alley	200	
Narrow two lane	250	
Sidewalk Standard	50	If they exist
Large	100	
Wide two lane	300	
Four lane	500???	

### ENGAGEMENT METRICS

Engagement Metrics		
Standard	~ 1000 max	
Aimed	~ 1500 max	
Scoped	~ 3000 max	
Cover Run Distance	~ 500	
Room Clearing		

### SPECIAL CASES



### COVER TO ENGAGEMENT RELATIONSHIP

Goal: Define an inverse relationship between the amount of time the player is exposed while out of cover compared with the distance between the player and the incoming fire.

## VISUAL EXAMPLES

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### DOCUMENT HISTORY

Date	Authors	Description	Rev.
05/27/08	CRoby	Added Structure and Road sections	1.0
05/27/08	CRoby	Updated all the rules based on the 10" dimension.	0.08
02/20/08	CRoby	Correcting some of the specs and added in more information based on a conversation with Kirk	0.03
10/18/07	CRoby	Finished first rough draft of the document	0.02
10/17/07	CRoby	Started document. Porting the camera and weapon system track tickets to this document.	0.01