

# Ruler with Demi-Inch Units (Little Inches) [www.g-design.us/cd/Demi\\_Inch\\_Ruler\\_HowToMake.pdf](http://www.g-design.us/cd/Demi_Inch_Ruler_HowToMake.pdf)

A. The Demi-Inch ruler PDF's come in the following colors: (file # shown)

Find the 6 files at [www.g-design.us/cd#inch](http://www.g-design.us/cd#inch)



Notes: File #6 Blue (for sea battles!) & File #7 has no background color with black ruler units (the others have white ruler units) for snow, clear (if you can find transparency material large enough) or whatever colored paper stock you have already.

B. The **purpose of Demi-Inch rulers** is to make a **compromise sized ruler unit between centimeters and inches—that work well with standard HE templates**. The PDF files make rulers with 2-cm units (7.874”) if printed at 100% (no reduction). You will need paper like Tabloid size (11x17”) or larger. It will make 10 rulers.

If you reduce to 85% of size, then the ruler units will be .67” (2/3”) etc. You will be able to print on Legal size paper (8.5x14”) but will lose at least 1 ruler because of the width so make 9 rulers instead. If you reduce these rulers to 85% of size (through Page Setup) & your bases are .5” wide (or especially with no bases), you ought to reduce the Inch-scale HE templates to a comparable proportion (85%) also. If bases are .75” wide or especially if 1” wide, change Page Setup to 75% or 67% respectively.

See [www.g-design.us/cd#inch](http://www.g-design.us/cd#inch) and the CD TOB forum ([www.testofbattle.com](http://www.testofbattle.com)) for a discussion of why demi-inch rulers can be help to gamers with tiny scales like micro-armor to play games like CDtob. Suffice to say that if you use the 2-cm units herein, you are best off using HE artillery templates in Inch scale without reduction (i.e. a 2” template would still measure 2x2”).

C. The **ruler PDF's have 2 sections**, side by side... (10) alike for the first 20 units (i.e. 1-20) and (10) alike for the 2nd 20 (21-40). If you hinge them together with something like duct tape, the folded ruler will be 1/2” wide & 15.75” long, folding out to 31.5” measuring up to 40 units. For the .67” scale the ruler will be 1/3” wide almost 13.4” long or 26.8” unfolded.

**You can still measure up to 60”** (maximum visibility in games like CDtob) by measuring out to 40” then flopping & refolding the ruler over another 20”. Or **similarly to 48”** by flopping and noting the point “8” is at. Or just handwrite the following on the back: 48 at 16 cms from the end with 40(if using the 2-cm unit, i.e. 100%), 60 would be at the fold and for 1 & 2 level higher elevation, 70 (20 cms from the other end) & 80 (the other end).

D. Before printing, I suggest you **prepare TWO pieces of “suitable backing”**, each that's approx. 6x17” (bigger than needed). Suitable backing is something strong but easy to cut. Ideas: cardboard, sheet styrene, thin modelers plywood, gatorboard, cardboard. Another idea is to take the printed sheet to a printer or office supply store with laminating equipment. If the clear plastic material is very heavy (& ideally matte finish), you don't need a backing. Unfortunately many only stock the 9x12” size in the heavy lamination (not large enough).

**Materials:** (2) pieces of backing 6x17” (for 2-cm ruler units) or 5x14” for .67” ruler units  
Spray adhesive or other way of attaching printed rulers  
Paper cutter or sharp exacto knife  
5-6” Duct tape (to make hinge)

## E. How-to Steps:

- Print the ruler unit chosen from the PDF & **input % of reduction** if units desired are smaller than 2-cms\*
- Trim off most of the excess
- Cut the 2 ruler-sections apart carefully—between the 1-20 & 21-40 rulers
- Glue the each ruler section to the backing noted in (D)
- Trim down to the **edge of the ruler sections**, all 4 edges but **do not cut out the rulers!**
- Put the 2 sections with ruler units **face down** with the **20 & 21 units touching**
- Put 1 big piece of duct tape on the back of the rulers
- Cut out ruler carefully; paper cutter tends to “wander” when cutting long pieces like this
- You're done! Or if you haven't made up Inch-scale HE Templates go to same website ([www.g-design.us/cd#he](http://www.g-design.us/cd#he))

\*You could make the units larger than 2-cms by enlarging but watch out for many printers that have “non-printing” gap; mine is .56” at the bottom of the page and about .2” at the top of the page. So you might need to be able to print on 12x18” or 13x19”. For example, if you are just making Inch-rulers (!?), then you'd enlarge to 127% and the stock would need to be over 20” long.