D.2 Paper size specifications

Although this cannot be called a unit, we take it up as an interesting coincidence.

An An-size sheet is "a rectangle whose long side and short side are in the proportion of $\sqrt{2} : 1$ and whose area is $2^{-n} \times 1\mathrm{m}^2$".

A Bn-size sheet is "a rectangle whose long side and short side are in the proportion of $\sqrt{2} : 1$ and whose area is $2^{-n} \times 1.5\mathrm{m}^2$".

Therefore, if we define the system of paper size specifications as "rectangles whose long side and short side are in the proportion of $\sqrt{2} : 1$ and whose area is $2^{n/2} \times (\mathrm{m}_u/12)^2$", then

n=22	A0	$2^{5.3}_{(12)} \times 2^{5.9}_{(12)}$	n=23	B0	$2^{5.6}_{(12)} \times 2^{6.0}_{(12)}$
n=20	A1	$2^{4.9}_{(12)} \times 2^{5.3}_{(12)}$	n=21	B1	$2^{5.0}_{(12)} \times 2^{5.6}_{(12)}$
n=18	A2	$2^{4.3}_{(12)} \times 2^{4.9}_{(12)}$	n=19	B2	$2^{4.6}_{(12)} \times 2^{5.0}_{(12)}$
n=16	A3	$2^{3.9}_{(12)} \times 2^{4.3}_{(12)}$	n=17	B3	$2^{4.0}_{(12)} \times 2^{4.6}_{(12)}$
n=14	A4	$2^{3.3}_{(12)} \times 2^{3.9}_{(12)}$	n=15	B4	$2^{3.6}_{(12)} \times 2^{4.0}_{(12)}$
n=12	A5	$2^{2.9}_{(12)} \times 2^{3.3}_{(12)}$	n=13	B5	$2^{3.0}_{(12)} \times 2^{3.6}_{(12)}$
n=10	A6	$2^{2.3}_{(12)} \times 2^{2.9}_{(12)}$	n=11	B6	$2^{2.6}_{(12)} \times 2^{3.0}_{(12)}$
n= 8	A7	$2^{1.9}_{(12)} \times 2^{2.3}_{(12)}$	n= 9	B7	$2^{2.0}_{(12)} \times 2^{2.6}_{(12)}$
n= 6	A8	$2^{1.3}_{(12)} \times 2^{1.9}_{(12)}$	n= 7	B8	$2^{1.6}_{(12)} \times 2^{2.0}_{(12)}$
n= 4	A9	$2^{0.9}_{(12)} \times 2^{1.3}_{(12)}$	n= 5	B9	$2^{1.0}_{(12)} \times 2^{1.6}_{(12)}$
n= 2	A10	$2^{0.3}_{(12)} \times 2^{0.9}_{(12)}$	n= 3	B10	$2^{0.6}_{(12)} \times 2^{1.0}_{(12)}$
n= 0	A11	$2^{-0.3}_{(12)} \times 2^{0.3}_{(12)}$	n= 1	B11	$2^{0.0}_{(12)} \times 2^{0.6}_{(12)}$

The size of a B5 sheet would then be 181.40mm $\times$ 256.54mm, which is almost the same as the actual size of 182.06mm $\times$ 257.47mm. The same can be said for the entire B series of paper sizes (the length of the upper side of a B5 size book is almost exactly $2/3^{\mathrm{rd}}\mathrm{m}_u$).