A construction of the assembly of a frame Richard N. Ball (rball@du.edu) University of Denver

We offer here a particularly simple and direct construction of the congruence frame of a given frame, aka its assembly, from the bounded meet semilattice of differences of frame elements. The construction enables economical proofs of two of the assembly's known attributes, namely ultranormality and ultraparacompactness, as well as a proof that the assembly is an essential extension of the frame with the same essential closure as the frame. The major new result is that the assembly is free over its meet semilattice of differences.