



**Figure 9.** Structures of reader modules bound to lysines and arginines. (A) 1.43-Å crystal structure of the complex of the PHD finger of BHC80 bound to H3(1-10) peptide (in yellow) (PDB: 2PUY). The bound H3 peptide can be traced from A1 to S10. Zinc ions are shown as silver balls. (B) 1.5-Å crystal structure of the complex of the WD40 motif of WDR5 bound to H3(1-9)K4me2 peptide. The bound K9me2-containing peptide can be traced from A1 to R8 (PDB: 2H6N). (C) Insertion of R2 into the central channel of the WD40 motif in the H3(1-9)K9me2-WDR5 complex. (D) Insertion of R2me2s into the central channel of the WD40 motif in the H3(1-15)R2me2sK9me2-WDR5 complex solved at 1.9 Å (PDB: 4A7J). (E) 3.2-Å crystal structure of the complex of the WD40 motif of p55 bound to H4(15-41) peptide (PDB: 3C9C). The bound H4 peptide can be traced from K31 to G41.