The aims in this paper is to analyze the morpho-phonological structures of four-syllabic reduplicants in Jingpo dialect. Those reduplicants could be divided into several categories, such as ABAC, AABB, ABAB, ABCB. Generally speaking, the onsets of even or odd syllables are identical. In four syllabic sequences, the light syllables proceed heavy syllables. The rimes of the latter heavy syllables show out the harmony patterns. Within the different rimes, the rimes of the proceeding syllables prefer to choose low vowels. Comparing the rimes, the rime with stop codas prefers to occur in the following syllables. Within the framework in Optimality Theory, it is supposed that the morpho-phonological interactions shown in the structures would be according to the ranking of the Faithfulness constraints, such as MAX and DEP, and the Markedness constraints, such as RED/BINARY-Foot, SONORARITY/NUCLEUS. For the four-syllabic prosodic reduplicated words, the foot with a heavy syllable aligns the right edges of the prosodic words. The choices of nuclear vowels are according to the scale of sonority. The relevant constraints in this paper are universal.