The closest fit O-notation for a dictionary comprehension to construct a dictionary of n keys and their associated values is O(n). This is true because the loop in the dictionary comprehension only needs to run n times in order to produce n keys, and the amount of time required for each time the loop is run is constant, as it just requires checking if the key is already in the dictionary or not, and then adding the value into the dictionary, both of which are constant operations. Therefore, the O-notation for the time complexity is O(n).