

ABSTRAK

UJI KEKUATAN LENTUR BALOK BETON PROFIL C UNTUK LANTAI BANGUNAN BERTINGKAT

Oleh :

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Penelitian ini dilatar belakangi oleh berkurangnya lahan tempat tinggal sehingga pembangunan gedung menjadi vertical keatas, untuk mengurangi penggunaan kayu, semen dan pasir dalam pembuatan lantai bertingkat agar lantai lebih ringan dan murah biaya pembuatannya, maka dibuatlah balok beton profil c dengan panjang 200 cm, lebar 20 cm, berat 47,2 N dan biaya untuk pembuatannya sebesar Rp64.468,04. Diuji dengan system dua titik pembebanan (SNI 03-4431-1997). Tiga kali pengujian tunggal batang balok beton profil c, specimen pertama mampu menahan beban hingga 14.130 N, specimen kedua 15.543 N dan specimen ketiga 12.717 N. sedangkan hasil uji KERATON dengan cara yang sama, specimen pertama mampu menahan beban hingga 8.478 N, specimen kedua 9.891 N dan specimen ketiga 7.065 N.

Tiga batang profil c dirangkai seperti lantai dan diuji, profil c mampu menahan beban hingga 33.912 N sedangkan tiga batang KERATON menahan beban hingga 22.608 N. kedua specimen mengalami penurunan ketahanan terhadap tekanan.

Kata kunci: system dua titik pembebanan, SNI 03—4431-1997, Lantai bangunan bertingkat, beton profil ringan

ABSTRACT

TEST OF CONCRETE OF CONCRETE BEAM PROFILE C FOR FLOOR BUILDING FLOOR

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This research is based on the decrease of residential land so that the construction of the building becomes vertical upwards, in order to reduce the use of wood, cement and sand in the flooring to make the floor lighter and cheaper the cost of manufacture, then made concrete beam c profile with length 200 cm, width 20 cm, weighing 47.2 N and the cost for manufacture is Rp64.468,04. Tested with two point loading system (SNI 03-4431-1997). Three times of a single bar a block of concrete C profile, the first specimen was able to withstand loads up to 14,130 N, 15,543 N second specimens and a third specimen of 12,717 N. While the results of the KERATON the same way, the first specimen was able to withstand loads up to 8,478 N, a second specimen of 9,891 N and the third specimen is 7,065N. Three c profile bars are strung together like floors and tested, c profiles are able to withstand loads of up to 33,912 N while three stems of KERATON bear loads of up to 22,608 N. both specimens decrease resistance to pressure.

Keywords: two-point loading system, SNI 03-4431-1997, Floor-level building, lightweight concrete profile.