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# LAMPIRAN

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Persiapan material



Pengujian karakteristik material



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<p>Pengujian karakteristik material</p>	
<p>Penimbangan material yang akan digunakan (Air, semen, agregat kasar (batu pecah dan limbah batu bata tahan api), agregat halus)</p>	
<p>Pencampuran material menggunakan <i>mixer</i> berkapasitas 75 liter.</p> <ol style="list-style-type: none"> <li>Pertama, agregat limbah batu bata tahan api, batu pecah, pasir dan semen dimasukkan ke dalam <i>mixer</i> dan dicampur selama 60 detik.</li> </ol>	

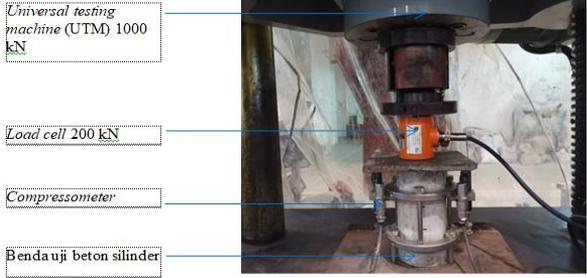
	<b>Universitas Hasanuddin</b>	<b>Nama : Nurul Hikmah Auliya</b>
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<p>2. Selanjutnya, air ditambahkan secara bertahap ke dalam mixer, dan pencampuran dilanjutkan selama 120 detik.</p> <p>3. Kemudian, campuran beton diaduk secara manual agar bahan – bahan yang menempel pada bagian bawah dan dinding mixer tercampur rata.</p> <p>4. Pencampuran menggunakan mixer dilanjutkan selama 60 detik hingga diperoleh kombinasi campuran beton segar yang merata.</p>	 
<p>Pengujian slump beton dengan target nilai desain slump yaitu <math>20 \pm 2</math> cm</p>	
<p>Memasukkan campuran ke ke dalam cetakan silinder besi berdiameter 100 mm dan tinggi 200 mm, lalu dipadatkan selama 60 detik menggunakan mesin vibrator.</p>	

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Selanjutnya, campuran beton didiamkan selama 24 jam sebelum cetakan dibuka.	
Proses perawatan ( <i>curing</i> ) benda uji beton semua variasi di <i>curing</i> menggunakan air pada suhu 20°C selama 7 dan 28 hari.	
Pengujian kuat tekan beton	

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<p>Pengujian modulus elastisitas</p>	 <p>Universal testing machine (UTM) 1000 kN</p> <p>Load cell 200 kN</p> <p>Compressometer</p> <p>Benda uji beton silinder</p>
<p>Hasil beton yang telah diuji</p>	 <p>Top photo (blue markings):</p> <ul style="list-style-type: none"> <li>SRB1: 9.960, f'c 25</li> <li>SRB2: 9.625, 4.220, f'c 25</li> <li>SRB3: 10.400, 4.190, f'c 25</li> </ul> <p>Bottom photo (red markings):</p> <ul style="list-style-type: none"> <li>S1: 11.170, 2.15 kg, 8.1</li> <li>S3: 9.625, 4.210</li> <li>S9: 7.230, 4.169</li> </ul>