LAMPIRAN 1

Time Schedule Pelaksanaan Tugas Akhir

Time Schedule Pelaksanaan Tugas Akhir

NO	KEGIATAN	MARET				APRIL				MEI				JUNI				JULI				AGUSTUS				SEPTEMBER				OKTOBER			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	PENYUSUNAN PROPOSAL																																
2	SEMINAR PROPOSAL																																
3	REVISI																																
4	PERSIAPAN BAHAN																																
5	PENGUJIAN BAHAN																																
6	PEMBUATAN BENDA UJI PAVING BLOCK																																
7	UJI KUAT TEKAN																																
8	ANALISA DATA & PENYUSUNAN LAPORAN																																
10	SEMINAR *DRAFT*																																
11	REVISI																																
12	UJIAN TA																																
13	REVISI																																

LAMPIRAN 2

Hasil Pengujian Pasir

Pengujian *Specific Grafity* dan Penyerapan Air pada Pasir

Hasil Pengujian:

LABORATORIUM BAHAN BANGUNAN **UNIVERSITAS KATOLIK SOEGIJAPRANATA**			
ANALISA *SPECIFIC GRAVITY* **DAN PENYERAPAN PASIR**			
Tgl. Praktikum : 27 April 2016			
A. Berat picnometer	=	163	gram
B. Berat contoh kondisi SSD	=	500	gram
C. Berat picnometer + air + contoh SSD	=	979	gram
D. Berat picnometer + air	=	659	gram
E. Berat contoh kering	=	498,4	gram
Apparent Spec. Grav. = E/(E+D-C)	=	2,79	
Bulk. Spec. Grav. Kondisi kering = E/(B+D-C)	=	2,77	
Bulk. Spec. Grav. Kondisi SSD = B/(B+D-C)	=	2,77	
% penyerapan air = (B-E)/E x 100%	=	0,32	%

Analisa Saringan Pasir

Dari pengujian yang telah dilaksanakan diperoleh hasil pengujian sebagai berikut:

a. Nomor saringan = 3/4

Ukuran saringan = 19,1 mm

Berat tertahan = 0 gr

% tertahan $= \frac{0}{938} \times 100\%$ = 0%

% tertahan kumulatif = (0 + 0) = 0%

% lolos kumulatif = 100% - 0% = 100%

b. Nomor saringan = 3/8

Ukuran saringan = 9,5 mm

Berat tertahan = 1,6 gr

% tertahan $= \frac{1,6}{938} \times 100\%$ = 0,17%

% tertahan kumulatif = (0 + 0,17) = 0,17%

% lolos kumulatif = 100% - 0,17% = 99,83%

c. Nomor saringan = 4

Ukuran saringan = 4,75 mm

Berat tertahan = 4,6 gr

% tertahan $= \frac{4,6}{938} \times 100\%$ = 0,49%

% tertahan kumulatif = (0,17 + 0,49)% = 0,66%

% lolos kumulatif = 100% - 0,66% = 99,34%

d. Nomor saringan = 8

Ukuran saringan = 2,36 mm

Berat tertahan = 29,8 gr

% tertahan $= \frac{29,8}{938} \times 100\%$ = 3,18%

% tertahan kumulatif = (0,66 + 3,18)% = 3,84%

% lolos kumulatif = 100% - 3,84% = 96,16%

e. Nomor saringan = 16

Ukuran saringan = 1,18 mm

Berat tertahan = 93,6 gr

% tertahan $= \frac{93,6}{938} \times 100\,\%$ = 9,98%

% tertahan kumulatif = (3,84 + 9,98)% = 13,82%

% lolos kumulatif = 100% - 13,82% = 86,18%

f. Nomor saringan = 30

Ukuran saringan = 0,6 mm

Berat tertahan = 100,2 gr

% tertahan $= \frac{100,2}{938} \times 100\%$ = 10,68%

% tertahan kumulatif = (9,98 + 10,68)% = 24,5%

% lolos kumulatif = 100% - 24,5% = 75,5%

g. Nomor saringan = 50

Ukuran saringan = 0,3 mm

Berat tertahan = 274 gr

% tertahan $= \frac{274}{938} \times 100\%$ = 29,21%

% tertahan kumulatif = (24,5 + 29,21)% = 53,71%

% lolos kumulatif = 100% - 53,71% = 46,29%

h. Nomor saringan = 100

Ukuran saringan = 0,15 mm

Berat tertahan = 250,4 gr

% tertahan $= \frac{250,4}{938} \times 100\%$ = 26,7%

% tertahan kumulatif = (53,71 + 26,7)% = 80,41%

% lolos kumulatif = 100% - 80,41% = 19,59%

i. Nomor saringan = 200

Ukuran saringan = 0,075 mm

Berat tertahan = 77,2 gr

% tertahan $= \frac{77,2}{938} \times 100\%$ = 8,23%

% tertahan kumulatif = (80,41 + 8,23)% = 88,64%

% lolos kumulatif = 100% - 88,64% = 11,36%

j. Pan

Berat tertahan = 106,6 gr

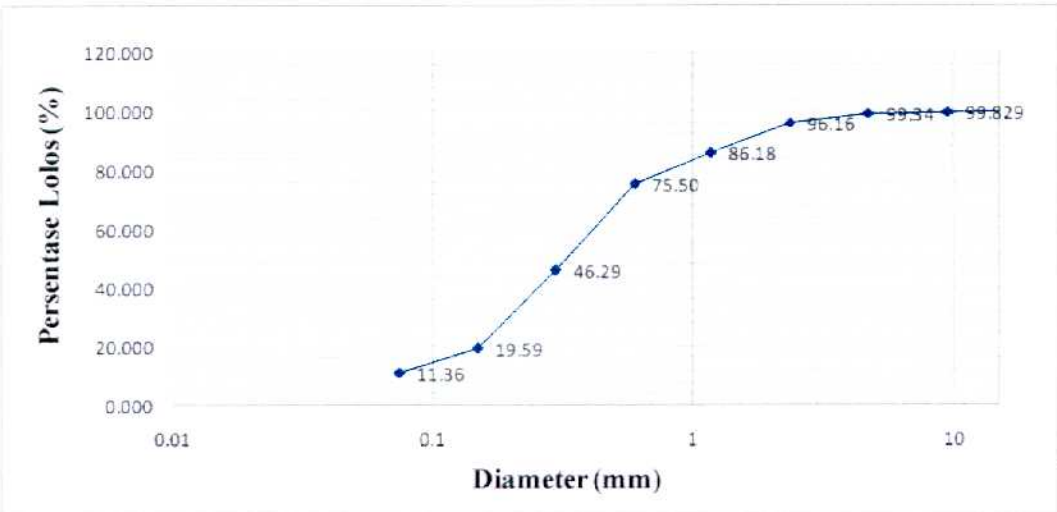
% tertahan $= \frac{106,6}{938} \times 100\%$ = 11,36%

% tertahan kumulatif = (88,64 + 11,36)% = 100%

% lolos kumulatif = 100% - 100% = 0%

Berat total = 938 gr

Nomor Saringan	Diameter Saringan (mm)	Berat Saringan (gram)	Berat Pasir dan Saringan (gram)	Berat Tertahan (gram)	% Tertahan	% Lolos	% Tertahan Kumulatif
3per4	19.1	572.4	572.4	0	0.00	100.00	0.00
3per8	9.5	532	533.6	1.6	0.17	99.83	0.17
4	4.750	442.2	446.8	4.6	0.49	99.34	0.66
8	2.360	419.4	449.2	29.8	3.18	96.16	3.84
16	1.180	421.4	515.0	93.6	9.98	86.18	13.82
30	0.600	420.2	520.4	100.2	10.68	75.50	24.50
50	0.300	407.8	681.8	274.0	29.21	46.29	53.71
100	0.150	401.6	652.0	250.4	26.70	19.59	80.41
200	0.075	284.4	361.6	77.2	8.23	11.36	88.64
Pan	-	269.8	376.4	106.6	11.36	0.00	100.00
Jumlah				**938.0**	**99.83**	**634.26**	**265.74**



Pengujian Kandungan Lumpur

Hasil Pengujian:

LABORATORIUM BAHAN BANGUNAN **UNIVERSITAS KATOLIK SOEGIJAPRANATA**		
KANDUNGAN LUMPUR PADA PASIR		
Tgl. Praktikum: 27 April 2016		
A. Berat pasir sebelum dicuci	=	949,4 gram
B. Berat pasir setelah dicuci	=	901,49 gram
Kadar Lumpur = (A-B)/B	=	5,31 %

LAMPIRAN 3

Hasil Pengujian Pecahan Keramik

Pengujian *Specific Grafity* dan Penyerapan Air pada Pecahan Keramik

Hasil Pengujian:

LABORATORIUM BAHAN BANGUNAN **UNIVERSITAS KATOLIK SOEGIJAPRANATA**			
ANALISA *SPECIFIC GRAVITY* **DAN PENYERAPAN PECAHAN KERAMIK**			
Tgl. Praktikum: 27 April 2016			
A. Berat picnometer	=	174	gram
B. Berat contoh kondisi SSD	=	500	gram
C. Berat picnometer + air + contoh SSD	=	934,5	gram
D. Berat picnometer + air	=	669	gram
E. Berat contoh kering	=	476,6	gram
Apparent Spec. Grav. = E/(E+D-C)	=	2,4	
Bulk. Spec. Grav. Kondisi kering = E/(B+D-C)	=	2,11	
Bulk. Spec. Grav. Kondisi SSD = B/(B+D-C)	=	2,22	
% penyerapan air = (B-E)/E x 100%	=	2,22	%

Analisa Saringan Pecahan Keramik

Dari pengujian yang telah dilaksanakan diperoleh hasil pengujian sebagai berikut:

a. Nomor saringan = 3/4

Ukuran saringan = 19,1 mm

Berat tertahan = 0 gr

% tertahan $= \frac{0}{975,8} \times 100\%$ = 0%

% tertahan kumulatif = (0 + 0) = 0%

% lolos kumulatif = 100% - 0% = 100%

b. Nomor saringan = 3/8

Ukuran saringan = 9,5 mm

Berat tertahan = 0 gr

% tertahan $= \frac{0}{975,8} \times 100\%$ = 0%

% tertahan kumulatif = (0 + 0) = 0%

% lolos kumulatif = 100% - 0% = 100%

c. Nomor saringan = 4

Ukuran saringan = 4,75 mm

Berat tertahan = 0 gr

% tertahan $= \frac{0}{975,8} \times 100\%$ = 0%

% tertahan kumulatif = (0 + 0)% = 0%

% lolos kumulatif = 100% - 0% = 100%

d. Nomor saringan = 8

Ukuran saringan = 2,36 mm

Berat tertahan = 6,8 gr

% tertahan $= \frac{6,8}{975,8} \times 100\%$ = 0,7%

% tertahan kumulatif = (0 + 0,7)% = 0,7%

% lolos kumulatif = 100% - 0,7% = 99,3%

e. Nomor saringan = 16

Ukuran saringan = 1,18 mm

Berat tertahan = 183,6 gr

% tertahan $= \frac{183,6}{975,8} \times 100\%$ = 18,82%

% tertahan kumulatif = (0,7 + 18,82)% = 19,51%

% lolos kumulatif = 100% - 19,51% = 80,49%

f. Nomor saringan = 30

Ukuran saringan = 0,6 mm

Berat tertahan = 240,2 gr

% tertahan $= \frac{240,2}{975,8} \times 100\%$ = 24,62%

% tertahan kumulatif = (19,51 + 24,62)% = 44,13%

% lolos kumulatif = 100% - 44,13% = 55,87%

g. Nomor saringan = 50

Ukuran saringan = 0,3 mm

Berat tertahan = 180,4 gr

% tertahan $= \frac{180,4}{975,8} \times 100\%$ = 18,49%

% tertahan kumulatif = (44,13 + 18,49)% = 62,62%

% lolos kumulatif = 100% - 62,62% = 37,38%

h. Nomor saringan = 100

Ukuran saringan = 0,15 mm

Berat tertahan = 158,4 gr

% tertahan $= \frac{158,4}{975,8} \times 100\%$ = 16,23%

% tertahan kumulatif = (62,62 + 16,23)% = 78,85%

% lolos kumulatif = 100% - 78,85% = 21,15%

i. Nomor saringan = 200

Ukuran saringan = 0,075 mm

Berat tertahan = 118,6 gr

% tertahan $= \frac{118,6}{975,8} \times 100\%$ = 12,15%

% tertahan kumulatif = (78,85 + 12,15)% = 91%

% lolos kumulatif = 100% - 91% = 9%

j. Pan

Berat tertahan = 87,8 gr

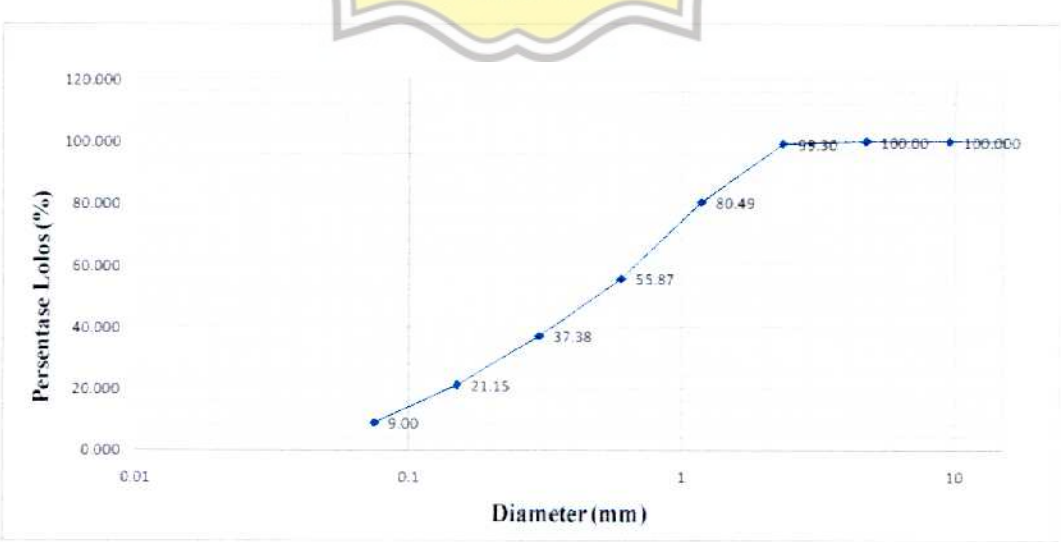
% tertahan $= \frac{87,8}{975,8} \times 100\%$ = 9%

% tertahan kumulatif = (91 + 9)% = 100%

% lolos kumulatif = 100% - 100% = 0%

Berat total = 975,8 gr

Nomor Saringan	Diameter Saringan (mm)	Berat Saringan (gram)	Berat Keramik dan Saringan (gram)	Berat Tertahan (gram)	% Tertahan	% Lolos	% Tertahan Kumulatif
3per4	19.1	572.6	572.6	0	0.00	100.00	0.00
3per8	9.5	532	532	0	0.00	100.00	0.00
4	4.750	442.4	442.4	0.0	0.00	100.00	0.00
8	2.360	419.4	426.2	6.8	0.70	99.30	0.70
16	1.180	421.4	605.0	183.6	18.82	80.49	19.51
30	0.600	420.0	660.2	240.2	24.62	55.87	44.13
50	0.300	407.6	588.0	180.4	18.49	37.38	62.62
100	0.150	401.8	560.2	158.4	16.23	21.15	78.85
200	0.075	284.4	403.0	118.6	12.15	9.00	91.00
Pan	-	269.6	357.4	87.8	9.00	0.00	100.00
		Jumlah		**975.8**	**100.00**	**603.20**	**296.80**



Pengujian Kandungan Lumpur Pecahan Keramik

Hasil Pengujian:

LABORATORIUM BAHAN BANGUNAN **UNIVERSITAS KATOLIK SOEGIJAPRANATA**		
KANDUNGAN LUMPUR PADA PECAHAN KERAMIK		
Tgl. Praktikum: 27 April 2016		
A. Berat pasir sebelum dicuci	=	970 gram
B. Berat pasir setelah dicuci	=	954,48 gram
Kadar Lumpur = (A-B)/B	=	1,63 %

LAMPIRAN 4

Nilai Standar Deviasi Benda Uji *Paving Block*

Perhitungan Nilai Standar Deviasi

No.	Umur Pengujian (Hari)	Kadar Pecahan Keramik	Nomor Sampel	Nilai Kuat Tekan (kg/cm^2) (X)	Nilai Kuat Tekan Rata-Rata (kg/cm^2) (X_1)	X_i - X
1.	7	0%	1	270	273,333	3,333
			2	270		3,333
			3	280		-6,667
		5%	1	320	325	5
			2	325		0
			3	330		-5
		10%	1	305	321,667	16,667
			2	325		-3,333
			3	335		-13,333
		15%	1	275	281,667	6,667
			2	285		-3,333
			3	285		-3,333
2.	14	0%	1	365	388,5	23,333
			2	390		-1,667
			3	410		-21,667
		5%	1	390	395	5
			2	390		5
			3	405		-10
		10%	1	395	396,667	1,667
			2	395		1,667
			3	400		-3,333
		15%	1	440	447,5	7,5
			2	450		-2,5
			3	452,5		-5
3.	28	0%	1	415	424,167	9,167
			2	417,5		6,667

			3	440		-15,833
		5%	1	425	436,667	11,667
			2	430		6,667
			3	455		-18,333
		10%	1	450	465	15
			2	470		-5
			3	475		-10
		15%	1	510	523,333	13,333
			2	520		3,333
			3	540		-16,667

$$S = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(X_i - \bar{X})^2}$$

PENGUJIAN 7 HARI

1. Kadar Pecahan Keramik 0%

   $$S = \sqrt{\frac{1}{3-1} \times (3{,}333^2 + 3{,}333^2 + (-6{,}667)^2)}$$

   $= 5{,}773$

2. Kadar Pecahan Keramik 5%

   $$S = \sqrt{\frac{1}{3-1} \times (5^2 + 0^2 + (-5)^2)}$$

   $= 5$

3. Kadar Pecahan Keramik 10%

   $$S = \sqrt{\frac{1}{3-1} \times (16{,}667^2 + (-3{,}333)^2 + (-13{,}333)^2)}$$

   $= 15{,}275$

4. Kadar Pecahan Keramik 15%

   $$S = \sqrt{\frac{1}{3-1} \times (6{,}667^2 + (-3{,}333)^2 + (-3{,}333)^2)}$$

   $= 5{,}773$

PENGUJIAN 14 HARI

1. Kadar Pecahan Keramik 0%

$$S = \sqrt{\frac{1}{3-1} \times (23{,}333^2 + (-1{,}667)^2 + (-21{,}667)^2)}$$

$= 22{,}546$

2. Kadar Pecahan Keramik 5%

$$S = \sqrt{\frac{1}{3-1} \times (5^2 + 5^2 + (-10)^2)}$$

$= 8{,}660$

3. Kadar Pecahan Keramik 10%

$$S = \sqrt{\frac{1}{3-1} \times (1{,}667^2 + 1{,}667^2 + (-3{,}333)^2)}$$

$= 2{,}886$

4. Kadar Pecahan Keramik 15%

$$S = \sqrt{\frac{1}{3-1} \times (7{,}5^2 + (-2{,}5)^2 + (-5)^2)}$$

$= 6{,}614$

PENGUJIAN 28 HARI

1. Kadar Pecahan Keramik 0%

$$S = \sqrt{\frac{1}{3-1} \times (9{,}167^2 + 6{,}667^2 + (-15{,}833)^2)}$$

$= 13{,}769$

2. Kadar Pecahan Keramik 5%

$$S = \sqrt{\frac{1}{3-1} \times (11{,}667^2 + 6{,}667^2 + (-18{,}333)^2)}$$

$= 16{,}072$

3. Kadar Pecahan Keramik 10%

$$S = \sqrt{\frac{1}{3-1} \times (15^2 + (-5)^2 + (-10)^2)}$$

$= 13{,}228$

4. Kadar Pecahan Keramik 15%

$$S = \sqrt{\frac{1}{3-1} \times (13{,}333^2 + 3{,}333^2 + (-16{,}667)^2)}$$

$= 15{,}275$

Umur Pengujian	Kadar Pecahan Keramik	Nilai Standar Deviasi
7 Hari	0%	5,773
	5%	5
	10%	15,275
	15%	5,773
14 Hari	0%	22,546
	5%	8,660
	10%	2,886
	15%	6,614
28 Hari	0%	13,769
	5%	16,072
	10%	13,228
	15%	15,275

UNIVERSITAS KATOLIK SOEGIJAPRANATA

LAMPIRAN 05

Dokumentasi

Limbah Keramik

Sampel Pasir dalam Keadaan SSD

Proses Penghancuran Limbah Keramik

Sampel Pecahan Keramik dalam Keadaan SSD

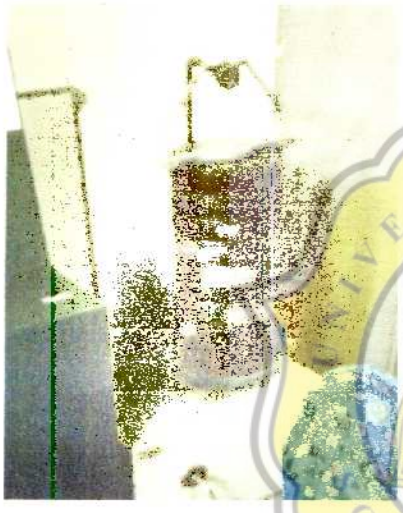
Limbah Keramik yang Telah Dihancurkan ke Dalam Bentuk Pecahan

Penumbukan Sampel Pengujian dengan Kerucut

UNIVERSITAS KATOLIK SOEGIJAPRANATA

Pengujian *Specific Gravity* pada Pasir dan Pecahan Keramik

Pengujian Kadar Lumpur pada Pecahan Keramik



Pengujian Analisa Saringan

Proses Pencampuran Bahan Komposisi *Paving Block*

Pengujian Kadar Lumpur pada Pasir

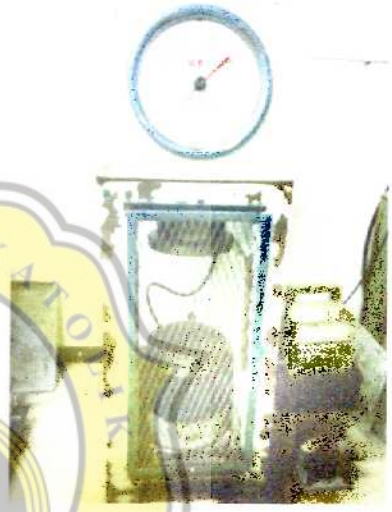
Mesin Pemadat *Paving Block*

UNIVERSITAS KATOLIK DE GIJAPRANATA

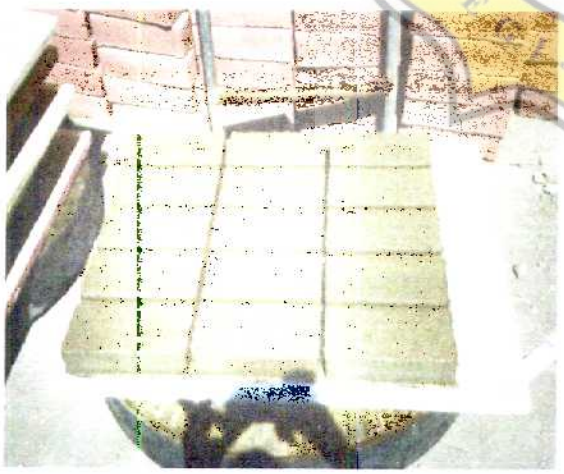
Adukan Dimasukkan ke Dalam Mesin Pemadat

Perawatan *Paving Block*

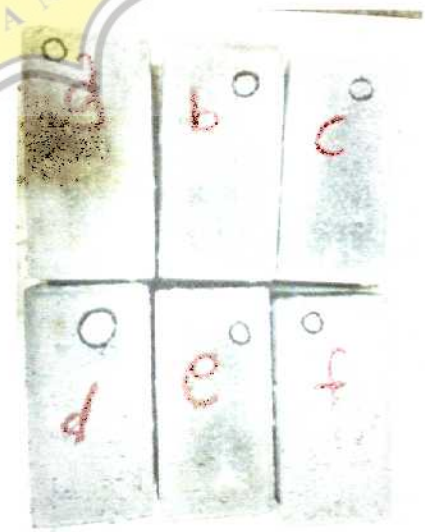
Proses Pemadatan Adukan



Alat Uji Kuat Tekan



Paving Block Setelah Proses Pemadatan



Paving Block yang Telah Diberi Identitas

Pembacaan Nilai Kuat Tekan

Paving Block yang Pecah Setelah Pengujian Kuat Tekan

Proses Pengujian Kuat Tekan *Paving Block*

Keretakan pada *Paving Block* Setelah Pengujian Kuat Tekan

UNIVERSITAS KATOLIK SOEGIJAPRANATA

LAMPIRAN 06

Hasil Tes Anti Plagiasi

FORMULIR SCAN ANTI PLAGIARISME

Nama : Aulia Zakaria Puri & Imasuri

Alamat email : zakariapuri@gmail.com & imasuri@gmail.com

Fak. / Prodi : Teknik Sipil NIM : 12.12.0039 & 12.12.0045

berupa (TESIS, TUGAS AKHIR, SKRIPSI, SUMMARY, LAPORAN KERJA PRAKTEK)

dengan judul : Pengaruh Penambahan Pecahan Keramik pada Pembuatan Paving Block Ditinjau dari Nilai Kuat Tekan

Petugas,

NB. Laporan hasil scan terlampir

6,5%

Semarang, 24 Agustus 2016

yang menyerahkan,

Aulia Z. P.

untuk Yang bersangkutan *

523 matches from 100 sources, of which 32 are online sources.

PlagLevel: **6.5%**/10.4%

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- [2] (17 matches, **1.1%**/1.3%) from dokumen.tips/documents/pengaruh-variasi-...aving-block-terhadap-kek
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