

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018

2020 – 2021



A Project Report

On

**“COMPARATIVE STUDY ON PARTIAL REPLACEMENT OF
COCONUT SHELL CONCRETE WITH CONVENTIONAL
CONCRETE”**

**Submitted in the partial fulfillment of the requirement for the
VII Semester Project Work – 15CVP85 for the award of degree of**

Bachelor of Engineering

in

Civil Engineering

Submitted by

AVINASH D RATHOD	- 1GV15CV004
BALAJI E G	- 1GV15CV005
VITTAL NAVI	- 1GV15CV027

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mr. MUNIKRISHNA D M, Assistant Prof,

Dept. of Civil, Dr. TTIT



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields - 563120

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018

2019 – 2020



A Project Report

On

**“COMPARITIVE STUDY ON PARTIAL REPLACEMENT OF
COCONUT SHELL CONCRETE WITH CONVENTIONAL
CONCRETE”**

**Submitted in the partial fulfillment of the requirement for the
VII Semester Project Work – 15CVP85 for the award of degree of**

Bachelor of Engineering

in

Civil Engineering

Submitted by

AVINASH D RATHOD - 1GV15CV004

BALAJI E G - 1GV15CV005

VITTAL NAVI - 1GV15CV027

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

**Mr. MUNIKRISHNA D M, Assistant Prof, Dept.of
Civil, Dr. TTIT**

Guide

**Mr. MUNIKRISHNA D M
Assistant Professor**

HOD

Dr.Ramesh K

Principal

Dr.Syed Ariff

ABSTRACT

It is found that so many wastes which can be used in traditional concrete like e-wastes, rubber tyre waste, glass waste etc. The coconut shell is also a main waste which can be used in traditional concrete. Generally, coconut shells are used in traditional concrete in the form of viz., coconut shell aggregate and coconut shell fiber. This paper describes coconut shells are used as replacement of coarse aggregates. The compressive and flexural strength test were taken on 10%, 20% and 30% replacement of coarse aggregate to coconut shells. It is observed that the compressive strength of concrete is reduced in some extent and the flexural strength also reduced as replacement of coconut shell is increased, but the 10% replacement is possible to use in construction work and 20% and 30% replacement are possible to use for less important construction work under some conditions.

KEY WORDS: - Coconut Shell, Compressive strength, Flexural Strength, Mix Design, Cost Comparison, Coarse Aggregate & Fine Aggregate.

**VISVESVARAYA TECHNOLOGICAL
UNIVERSITY Belagavi – 590018
2020 – 2021**



A Project Report

on

**“SEISMIC ANALYSIS OF MULTI STOREY ASYMMETRIC
BUILDING USING ETABS”**

**Submitted in the partial fulfillment of the requirement for the
VII Semester Project Work – 17CVP85 for the award of degree of**

Bachelor of Engineering

in

Civil Engineering

Submitted by

CHANDANA Y H - 1GV16CV007

PAVAN KUMAR R S - 1GV17CV019

HEERA GOPINATH - 1GV18CV401

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Ms. Sonamma masane , Assistant Prof,

Dept. of Civil, Dr. TTIT



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields - 563120

Dr.T.Thimmaiah Institute of Technology

Oorguam Post, K.G.F-563120


(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi, Approved by Govt. Of Karnataka and ISO 21001-2018 Certified)



DEPARTMENT OF CIVIL ENGINEERING.

CERTIFICATE

Certified that the Project Work entitled "*Seismic analysis of multi storey asymmetric building using ETABS*" is a bonafied work carried out by Chandana Y H - 1GV16CV007, Pvan kumar R S – 1GV17CV019, Heera gopinath – 1GV18CV401 in the partial fulfillment for the award of degree of Bachelor of Engineering in **Civil Engineering of the Visvesvaraya Technological University, Belagavi** during the year 2020- 2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the Project report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.


.....
Signature of Guide
Ms. Sonamma masane


.....
Signature of HOD
Head of the Department
Dept. of Civil Engineering
Dr. Ramesh K
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120


.....
Signature of Principal
Dr. Syed Ariff
PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120.

Name of Examiners

1. M. NANEELA
2. Dr. Ramesh K

Signature with Date

1. M. Naneela 09/08/21
2. Dr. Ramesh K 09/08/21

ABSTRACT

India is prone to strong earthquake shaking, and hence earthquake resistant analysis is essential. The engineers do not attempt to make earthquake proof buildings that will get damaged even during the rare but strong earthquake. Such buildings will be too robust and also too expensive. Practically no building can be made earthquake proof. The engineering intention is to make buildings earthquake resistant, such buildings resist the effects of ground shaking, although they may get damaged severely but would not collapse during the strong earthquake. Thus, the safety of people and contents is assured in earthquake resistant design of buildings and there by a disaster is avoided. This is a major objective of seismic design codes throughout the world in recent times. The sixth revision of IS 1893 (part 1):2016, “criteria for earthquake resistant design of structures” have been published by bureau of Indian standards recently in December 2016. In this new code many changes have been included considering standards and practices prevailing in different countries and in India. Extended three-dimensional analysis of building systems – “ETABS 15” is a special purpose computer program developed specifically for building systems. The main objective of this study is to review seismic analysis of, multi story buildings by various researchers using ETABS as per the provisions code IS 1893 (part 1): 2016. The various parameters considering in analysis by researchers irregularity, mass irregularity, re-entrant corners, different locations of shear walls, different building shapes, masonry infill walls, etc.

Keywords: ETABS, seismic analysis, mass irregularity, locations of shear wall, earthquake resistant building.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
Belagavi – 590018
2020 – 2021



A Project Report
on

**“PARTIAL REPLACEMENT OF CEMENT WITH GLASS POWDER IN
CONCRETE”**

**Submitted in the partial fulfillment of the requirement for the
VIII Semester Project Work – 17CVP85 for the award of degree of**

Bachelor of Engineering

in

Civil Engineering

Submitted by

MOHAMED INAYATHULLA	1GV17CV016
TITUS WILSON	1GV17CV024
BASAVARAJ GOOLAPPA	1GV17CV004
PALLAVI B S	1GV17CV018

Carried out at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mr. Praveen K, Assistant Professor,

Dept. of Civil, Dr. TTIT



Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields – 563120



Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

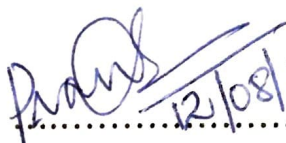
Oorguam Post, K.G.F-563120

(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi,
Approved by Govt. Of Karnataka and ISO 21001-2018 Certified)

DEPARTMENT OF CIVIL ENGINEERING.

CERTIFICATE

Certified that the Project Work entitled "*PARTIAL REPLACEMENT OF CEMENT WITH GLASS POWDER IN CONCRETE*" is a bonafied work carried out by **MOHAMED INAYATHULLA--1GV17CV016, TITUS WILSON--1GV17CV024, BASAVARAJ GOOLAPPA--1GV17CV004, PALLAVI B S--1GV17CV018**, in the partial fulfillment for the award of degree of Bachelor of Engineering in **Civil Engineering of the Visvesvaraya Technological University, Belagavi** during the year 2020-2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the Project report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.


.....
12/08/21
Signature of Guide
Mr. Praveen K



.....
12/8/21
Signature of HOD
Head of Department
Dr. K Ramesh
Dept. of Civil Engineering
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120


.....
12/8/2021
Signature of Principal
Dr. Syed Ariff
PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120.

Name of Examiners

1.  Dr. K Ramesh
2. M.MANEELA

Signature with Date

1.  12/8/2021
2. M. Maneela
12/8/2021

ABSTRACT

Concrete is one of the world's most used construction material due to its versatility, durability, and economy. Sustainable construction practice means creation and responsible management of a healthy built environment considering resource efficiency and ecology. Manufacturing of cement is a major source of greenhouse gas emissions. Million tons of waste glass is being generated annually all over the world. Once it becomes as waste it is disposed as landfills, which is unsustainable as it does not decompose in environment. Glass material when ground to a very fine powder shows pozzolanic properties which can be used as partial replacement for cement in concrete. Glass is replaced in certain intervals of 5% and strength is noted down.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018

2020 – 2021



A Project Report

On

“UTILIZATION OF BLACK COTTON SOIL IN MANUFACTURING OF
BRICKS WITH RICE HUSK ASH AS ADMIXTURE”

Submitted in the Partial fulfillment of the requirement for the VIII Semester

Project Work – 17CVP85 for the award of Degree of

Bachelor of Engineering

In

Civil Engineering

Submitted by

Bhuvaneshwari B (1GV17CV006)

Bridgit Chawang T (1GV17CV007)

HaobijamAbokson Singh (1GV17CV010)

Khangembam Malemthaba (1GV17CV011)

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mrs.Silviya.L

Assistant Professor,

Dept. of Civil, Dr.TTIT



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields – 563120

DR.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

OORGAUM, KOLAR GOLD FIELDS, KARNATAKA-563120

(Affiliated to Visvesvaraya Technological University, Belgavi)



CERTIFICATE

Certified that the Project Work entitled "*UTILIZATION OF BLACK COTTON SOIL IN MANUFACTURING OF BRICKS WITH RICE HUSK ASH AS ADMIXTURE*" is a bonafied work carried out by BHUVANESHWARI B (1GV17CV006), BRIDGIT CHAWANG T (1GV17CV007), HAOBJAM ABOKSON SINGH (1GV17CV010), KHANGEMBAM MALEMTHABA (1GV17CV011) in the fulfillment for the award of Degree of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2020- 2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.

.....
Signature of Guide
Mrs. Silviya L

.....
Signature of HOD
Dr. Ramesh K
Head of the Department

.....
Signature of Principal
Dr. Syed Ariff
PRINCIPAL

Name of Examiners

1. N. Maneela

2. Dr. Ramesh K

Dept. of Civil Engineering

Dr. T. Thimmaiah Institute of Technology

Oorgaum, K.G.F. - 563 120

Signature of

1. N. Maneela

2. Dr. Ramesh K

Dr. T. Thimmaiah Institute of Technology

Oorgaum, K.G.F. - 563 120.

9/8/21

9/8/21

ABSTRACT

The black cotton soil is a type of expansive soil which have swelling and impervious nature. In the past years, a wide range of alternative bricks have been available in the field of construction with change in the raw material for the same product. Here we are using Black Cotton soil as raw material in manufacturing bricks with the addition of some admixtures to change the properties of the black cotton soil. In our case Rice husk ash as admixtures are added to black cotton soil since they exhibit high swelling and shrinkage. This analysis study, describes the practicability of utilizing black cotton soil as a raw material with admixtures in the production of bricks. Clay is replaced with black cotton soil as an alternative raw material. It has been found out that black cotton soil bricks mixed with rice husk ash as admixtures outperformed normal bricks in almost all aspects.

Keywords: *Black cotton soil, admixtures, rice husk ash, construction, expansive soil*

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
Belagavi – 590018
2020 – 2021



A

Project Report

On

**“SIGNIFICANCE OF PLASTIC IN IMPROVING THE PROPERTIES
OF REGUR SOIL”**

Submitted in the Partial fulfillment of the requirement for the VIII Semester
Project – 17CVP85 for the award of degree of
Bachelor of Engineering

In

Civil Engineering

Submitted by

MANJUNATH T	-(1GV18CV402)
BHAVANA S	-(1GV17CV005)
HANUMANTHESH M J	-(1GV18CV400)
NAVEEN KUMAR B N	-(1GV18CV405)

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Prof M Maneela,
Associate Professor,
Department of Civil Engineering
Dr. TTIT, K.G.F.



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Oorgaum Post, K.G.F- 563120

(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi)



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY
Oorgaum Post, K.G.F- 563120
(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi,
Approved by Govt. of Karnataka and ISO 21001-2018 Certificate)



DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE

Certified that the Project entitle "**SIGNIFICANCE OF PLASTIC IN IMPROVING THE PROPERTIES OF REGUR SOIL**" is a bonafied work carried out by **MANJUNATH T (1GV18CV402), BHAVANA S (1GV17CV005), HANUMANTHESH M J (1GV18CV400), NAVEEN KUMAR B N(1GV18CV405)** in the partial fulfilment for the award of degree of Bachelor of Engineering in **Civil Engineering of the Visvesvaraya Technological University, Belagavi** during the year 2020- 2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the Seminar report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.

..... M. Maneela
9/8/21
Signature of Guide
Prof M Maneela,
Associate Professor

.....
Signature of HOD
Head of the Department
Dr. Ramesh K
Dept. of Civil Engineering
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120

.....
Signature of Principal
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120.

Name of Examiners
1. M. MANEELA
2.

Signature with Date
1. M Maneela 9/8/21
2.

ABSTRACT

Black cotton which is called as an expansive soil has a property of Shrink and Swell depending upon the availability of water content which causes hazard to the structures constructed over them. This paper was an attempt which was made to increase properties of regur soil by adding plasticstrips in different sizes. Disposal of plastic has become one of the Challenging task. In our currentproject we are using plastic waste in different proportion will results in reducing the problem of disposing plastic waste. Plastic strips of size (5 mm × 7.5 mm, 10 mm × 15 mm, 15 mm × 20 mm)are prepared and added to Black cotton Soil at different treatment levels (0.5%, 1% and 2%) by weight . From the Laboratory results we can observe that there was a significant improvement in properties such as maximum Dry Density, Free Swell, Unconfined Compression Test and direct sheartest.It also showed that adding additives to expansive soil will be effective for improvement in properties of BC Soil. The desiccation cracking behavior and swelling of the soil also reduced to a smaller extent. It was also observed that there is an slight improvement in maximum dry density and little reduction in optimum moisture content

Keywords: Plastic bottles (PET), MDD & OMC, and UCC Test

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590018

2020 – 2021



A Project Report

On

“ANALYSIS AND DESIGN OF TALL BUILDING”

Submitted in the partial fulfillment of the requirement for the VIII Semester

Project work – 17CVP84 for the award of degree of

Bachelor of Engineering

In

Civil Engineering

Submitted by

Manoah Gladwin S Daniel (1GV17CV015)

Pawan Sai S (1GV17CV020)

Vinay M Gowda (1GV17CV026)

Mukul K (1GV18CV403)

Carried out at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Miss. Sonamma

Assistant Professor,
Dept. of Civil, Dr.TTIT



Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields – 563120

Dr.T.Thimmaiah Institute of Technology

Oorguam Post, K.G.F-563120

(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi, Approved by Govt. Of Karnataka and ISO 21001-2018 Certified)



DEPARTMENT OF CIVIL ENGINEERING.

CERTIFICATE

Certified that the Project Work entitled “ANALYSIS AND DESIGN OF TALL BUILDING” is a bonafied work carried out by Manoah Gladwin S Daniel(1GV17CV015), Pawan Sai S- (1GV17CV020), Vinay M Gowda - (1GV17CV026), MUKUL K -(1GV18CV403) in the partial fulfillment for the award of degree of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2020- 2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the Project report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.

.....
9/8/2021

Signature of Guide

Miss. Sonamma

.....
9/8/2021

Signature of HOD

Head of the Department
Dept. of Civil Engineering
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120
Dr. Ramesh K

.....
13/8/2021

Signature of Principal

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorguam, K.G.F. - 563 120
Dr. Syed Arif

Name of Examiners

1. Dr. Ramesh K
2. M. MANEELA

Signature with Date

1. Dr. Ramesh K
9/8/21
2. M. Maneela
9/8/21

ABSTRACT

Plastic waste is one such resource, a major component of solid waste which is abundantly available and disposed of without proper treatment. There has been an exponential growth in municipal plastic waste disposal especially in urban areas which deteriorates the beauty of the landscape. Plastic was found to be an effective binder for bitumen mixes used in flexible pavements. This efficient method helps the pavements to resist higher temperature by minimizing the formation of cracks and reducing rainwater infiltration which otherwise leads to the development of potholes. These pavements have shown improved crushing and abrasion values and reduced water seepage. Plastic roads would be a boon for India's hot and extremely humid climate, where temperatures frequently cross 50°C and torrential rains create havoc, leaving most of the roads with big potholes. Bituminous Concrete(BC) is a composite material mostly used in construction projects like road surfacing, airports, parking lots etc. It consists of asphalt or bitumen (used as a binder) and mineral aggregate which is mixed together & laid down in layers then compacted. Now a day, the steady increment in high traffic intensity in terms of commercial vehicles, and the significant variation in daily and seasonal

temperature put us in a demanding situation to think of some alternatives for the improvisation of the pavement characteristics and quality by applying some necessary modifications which shall satisfy both the strength as well as economic aspects .Also considering the environmental approach, due to excessive use of polythenes in the day to day business, the pollution to the environment is enormous. Since the polythenes are not biodegradable, the need of the current hour is to use the waste polyethenein some beneficial purposes.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI -590018

2020-2021



A PROJECT REPORT

on

“A STUDY ON MECHANICAL PROPERTIES OF M40 GRADE CONCRETE WITH FOSROC ADMIXTURE”

In

Civil Engineering

Submitted by

MUSKAN BASRI -(1GV17CV017)

MAMATHA K S -(1GV17CV014)

RAJESH -(1GV18CV406)

Carried out at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mr. ManjunathaSingh, Assistant prof,

Dept .of Civil , Dr.TTIT



Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of technology)

Department of Civil Engineering

Kolar Gold Fields-563120

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI -590018

2020-2021



A Project Report

on

“A STUDY ON MECHANICAL PROPERTIES OF M40 GRADE CONCRETE WITH FOSROC ADMIXTURE”

In

Civil Engineering

Submitted by

MUSKAN BASRI -(1GV17CV017)

MAMATHA K S -(1GV17CV014)

RAJESH -(1GV18CV406)

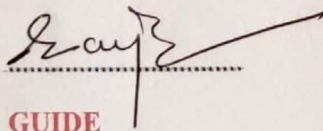
Carried out at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mr. ManjunathaSingh, Assistant prof,

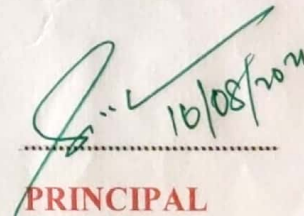
Dept .of Civil , Dr.TTIT


GUIDE

Mr. Manjunathasingh
Assistant professor


HOD

Head of the Department
Dept. of Civil Engineering
Dr. T. Thimmaiah Institute of Technology
Oorgaam, K.G.F. - 563 120


PRINCIPAL

Dr. Syed Ariff
PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaam, K.G.F. - 563 120.

Name Of The Examiner's

- 1.
- 2.

Signature With Date

- 1.
- 2.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi - 590018

2020 - 2021



A Project Report

On

**“USE OF RICE HUSK ASH IN COMPRESSED STABILIZED EARTH
BLOCKS”**

Submitted in the Partial fulfillment of the requirement for the VIII Semester

Project Work – 17CVP85 for the award of Degree of

Bachelor of Engineering

In

Civil Engineering

Submitted by

Rakesh A (1GV16CV017)

M Kunal Marian (1GV17CV013)

Shreyas Udgirkar (1GV17CV023)

Naresh F (1GV18CV404)

Carried out at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Mrs. Sowmya. L

Assistant Professor,

Dept. of Civil, Dr. TTIT



Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of civil engineering

Kolar gold fields - 563120

DR.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

OORGAUM, KOLAR GOLD FIELDS, KARNATAKA-563120

(Affiliated to Visvesvaraya Technological University, Belagavi)



CERTIFICATE

Certified that the Project Work entitled "*USE OF RICE HUSK ASH IN COMPRESSED STABILIZED EARTH BLOCKS*" is a bonafied work carried out by **RAKESH A (1GV16CV017)**, **M KUNAL MARIAN (1GV17CV013)**, **SHREYAS UDGIRKAR (1GV17CV023)**, **NARESH F (1GV18CV404)** in the fulfillment for the award of Degree of Bachelor of Engineering in **Civil Engineering of the Visvesvaraya Technological University, Belagavi** during the year 2020- 2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirement in respect of Project Work – 17CVP85 prescribed for the Bachelor of Engineering Degree.

...*Sowmya L*...
Signature of Guide
Mrs. Sowmya. L

...*Ramesh K*...
Signature of HOD
Dr. Ramesh K

...*Syed Ariff*...
Signature of Principal
Dr. Syed Ariff
PRINCIPAL

Name of Examiners

- 1.
- 2.

Head of the Department
Dept. of Civil Engineering
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120

Signature of Principal
Date: 11/12/2021
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120.

1.

ABSTRACT

Concern for sustainable technology has increased research activities on the production of more durable construction materials. In recent times, Rice Husk Ash (RHA) has successfully been used as supplementary material in concrete, improving both strength and durability due to its high pozzolanic activity. However, the effectiveness of RHA depends greatly on its quality which entirely depends on its production process which are yet to be established completely. However, the focus of this paper is not identifying the best production process but to explore the effectiveness of one of the possible uses of RHA in the construction industry. Blocks of different percentage of RHA (7.5%, 10%, 12.5%) were made and tested for Water Absorption, Crushing Strength, efflorescence test dimensionality test.

Keywords: *Rice Husk Ash, Construction, Pozzolanic activity, Blocks*