



Study Of Physicochemical Properties of Ceramic Tiles Based on Local Raw Materials

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ABSTRACT

This is it in the article local raw items based on ceramic the tiles physicist chemical properties learning about one series scientific considerations place received being the majority for useful will be said we hope

Keywords:

Raw materials, size, material, molding, production release, chemical properties, plastic method, conditions.

Local raw materials based on ceramic materials and items different size , shape and to properties have will be , but them work release technology approx one different will be and raw material materials digging get , raw materials mass preparation , raw the item molding , drying , baking , cooked items to varieties separate and in the warehouse to keep own into takes _

Also local _ raw materials based on ceramic materials and items work release for clay , usually directly _ factory nearby is located from cagers excavators and another car as well mechanisms using digging is taken . To the factory clay bodywork rollable in wagons , dump trucks , with belts in transporters , trolley on tractors is transported . Raw material mass in preparation from Karger digging received and to the factory carrying given clay natural from the situation most of the time items molding for invalid will be and natural structure break , from it harmful mixtures out throw _ Big mixtures grinding , clay additions Mixing is also convenient _ mouldable mass fruit to do for him moisten need will be

Raw material mixture half dry , plastic or in cold (shliker) methods is prepared . Of these

methods which one choose raw material of materials properties , ceramic of mass to the composition and items molding method , as well as their dimensions and to the task garden _ Half dry method raw material materials it is dried , divided , ground and carefully mixed . Clay , usually drying on the drums dry , dry feeling in the car , knee integrators or spherical in the mills breaks down and crushed , dry in mixers mixed . Pressable of powder humidity 9-11%. Pressable powder necessary to moisture have until water or with steam it gets wet . Half dry press lab prepared construction brick , floor tiles , covering tile and others in preparation raw material mixture of preparation half dry method is used . Plastic method raw material materials natural in humidity mixed or when the humidity is 18-23% clay mixture to be until water is added . Raw material materials grind and again work for different type mill from stone , mixing for while from clay pots is used . Plastic method plastic mouldable ceramic brick , ceramic stones , tiles , pipe and others work release for raw material mixture is prepared . Schlicker method raw material materials in advance grind powder will be done , then while a lot amount water pouring well done mixed , in

which one sexual suspension harvest to be need
 _ This is the method china and faience goods ,
 coating tile and others work in release is used .

Ceramic items xar different methods :
 plastic , half dry and pouring is molded . Molding
 method choose goods , type , and raw _ of the
 item composition and physical mechanic
 properties depend _ Plastic method molding-
 items plastic clay from the masses in the press
 preparation construction ceramic items work in
 release the most a lot spread out is a method .
 Humidity is 18-23% prepared clay mass strap of
 the press acceptance to do to the bunker will be
 directed.

In this physicist mass auger using
 addition mixed saying our explanation possible
 will be and it gets denser and exchanger
 mouthpiece with equipped of the press exit hole
 through bruce in the form of squeeze is issued .
 Mouthpiece replace the form and dimensions
 differently has been bruce get can _ From the
 press non-stop coming out brusni being
 prepared of items to the dimensions according
 to automatic cutting device him separately parts
 cut off divides _ Coating tiles , floor tiles and
 another thin ceramic items half dry method is
 molded . Such method low plasticity , little clay
 raw from the material finger and another items
 preparation can _ Half dry method of molding
 plastic method relatively the advantage is
 humidity little (8-12%) clay mass is used _ raw
 of the item to build the term much is reduced .
 Half dry method xar one item separately high
 fruitful in the presses is molded in this pressable
 mass 15 Mpa in molds up to pressure under two
 bilaterally pressing is estimated . Half dry
 method pressable items sure to the shape ,
 dimensions , strong corner and to the edges
 have will be Pour method sanitary engineering
 faience items and cover the tiles preparation for
 is used . In this way humidity from 45% over , in
 advance clay mass (shliker) is special to the
 molds is poured or the tiles in molding is used .
 Items drying _ Molded of items humidity reduce
 for them drying necessary _ For example raw
 humidity up to 8-10% is dried . Drying to
 account of the item durability increases ,
 cooking in the process cracks leaving and shape
 of change took is taken . Items natural and
 artificial method drying can _ Drying on their

porches natural method drying or to spend
 Demand does not , but long time (10-15 days)
 continues is enough From this except , naturally
 method drying for need a lot of space will be
 done .

Current at the time big in factories ,
 usually raw material from time to time with
 working camera in dryers and continuously
 working tunnel in dryers artificial method is
 dried . This method raw the item drying
 duration 1-3 days , thin items for while one how
 many hour continue is enough Items cooking _
 ceramic items work release technology of the
 process point doer stage . Cooking process
 conditional respectively three to the period to
 be possible : raw the item heating , cooking and
 cooling

Raw the item during heating
 temperature gradually up to 100-120° C will
 end , according to this from him free water out
 is sent . From this after temperature up to 750o
 C rises , clay in mineral and raw material of the
 mixture another in compounds organic
 mixtures on fire ends and chemical connected
 water out goes _ Cooking at 800-900 C in the
 process easy soluble compounds it dissolves
 and not melted particles wrapping takes , in this
 of the item linear dimensions shrinks and
 thickens . Temperature increase continue if
 delivered , clay mass meet _ Maximum cooking
 temperature of clay properties and item type
 depend _ Cooking as a result ceramic items
 stony to the state , high to strength , to water and
 to the cold to endurance and another to
 properties have will be Ceramic items while
 round , tunnel, slotted , roller and another in the
 ovens is cooked .

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